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ABSTRACT

This book of exercises is part of the package of materials developed for use in an English for Special Purposes project, which offers classes in reading, grammar, and emergency care attendant training for limited English proficient students. The exercises are designed to meet the need for early presentation of medical and allied health related grammar and vocabulary and introduction to specific structures with a high frequency of use in the target career field. The exercises are divided into 18 lessons. Although the focus of the exercises is improvement in language skills, they are also intended to reinforce openly the contents of the corequisite allied health courses. Specific topics covered in the exercises include use of the words "should," "may," "possible," and "be able to"; "there is" and "there are"; "that," "who," and "which" commands; comparatives and superlatives; "closed-ended" questions; "yes/no" questions; equivalent noun forms of verbs; "open-ended" questions; "verb/noun" pairs; passive and active sentences; distinguishing between "if" and "when"; sentences with conditions; scientific and medical words as nouns and verbs; and complex sentences. An exercise with essential vocabulary and expressions concludes each lesson. Review exercises are provided as necessary. (YLB)

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English for Special Purposes
Emergency Care Attendant

Structure and Vocabulary

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ENGLISH FOR SPECIAL PURPOSES

EMERGENCY MEDICAL ENGLISH: STRUCTURE AND VOCABULARY

Developed at El Paso Community College
by Dr. Marvin R. Coates

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of a grant from the Carl Perkins Postsecondary Education
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ENGLISH FOR SPECIAL PURPOSES/EMERGENCY CARE ATTENDANT TRAINING MODEL FOR EARLY ENTRY INTO ALLIED HEALTH OCCUPATIONAL PROGRAMS

DR. JERRY B. GATHINGS, PROJECT DIRECTOR

FORWARD

The study of English as it applies to a particular career field presents the instructor with no fewer challenges than the students face. While specific structures with a high frequency of use in the target career field should be covered as early as possible, they often tend to be structures of greatest complexity which rely most heavily for successful mastery on a student's having developed an adequate linguistic sophistication and some native speaker intuitions. It is the sincere hope of the author that the present work developed for students of English in an emergency medical technician course maintains that precarious balance between the need for early presentation of medical and allied health related grammar and vocabulary and the fear of overwhelming the student with needless complications.

While the focus of these exercises is improvement in language skills, they are also intended to reinforce openly the contents of the corequisite allied health courses. This intention at times reflects itself in the need for the ESL instructor to become conversant with allied health practices, procedures, and jargon; however, the reward in student interest and enthusiasm is many times greater than the expense of the effort.

Lesson 1

Sentences with "should" talk about something which the first responder does if possible. Look at the example:

a) The first responder should send someone to a telephone.

The example sentence uses "should" to show that the first responder sends someone to a telephone <u>if possible.</u> If there is no other person available, or no telephone, the first responder must know the other choices for action.

Exercise 1

Change each of the following into a sentence with "should," to show that the first responder does it <u>if possible.</u>

Example: The first responder performs a patient survey.

The first responder should perform a patient survey.

1. The first responder makes the patient as comfortable as possible.

2. She tries to control infection.

3. The first responder knows how to recognize life-threatening problems.

4. He arranges for medical assistance.

5. The first responder asks bystanders for help.

6. She continues emergency care until an ambulance arrives.

7. The first responder takes charge of the emergency situation.

8. He follows accepted emergency care procedures.

9. The first responder obeys police instructions.

10. She uses proper care techniques.

"Should not" tells what is best NOT to do. It means you should NOT perform a particular action if possible. Here is an example:

b) The first responder should not force his help on a patient.

The example sentence uses "should not" to show that the first responder does not usually force a patient to accept help. The sentence also means that the responder does help an unwilling patient if necessary.

Exercise 2

Change each of the following into a sentence with "should not" to show that the first responder does not perform the action if possible.

Example: The first responder doesn't move the patient.

The first responder should not move the patient.

1. The first responder doesn't leave the patient alone.

2. He doesn't get excited or upset.

3. The first responder doesn't frighten the patient.

4. She doesn't add injuries to the patient.

5. The first responder doesn't interfere with police or other officials.

6. He doesn't wait for an ambulance before helping the patient.

7. The first responder doesn't risk injuring bystanders.

8. She doesn't forget to talk to the patient about his condition.

9. He doesn't stop helping the patient until qualified help arrives.

10. The first responder doesn't delay in starting emergency procedures.

Sentences with "may" are important in emergency medical English because "may" has two meanings. One meaning of "may" is to tell about something that is possible, as in the following example:

c) The patient may have a broken arm.

The other meaning of "may" is "permitted," as in the example sentence below:

d) The first responder may help patients who give consent.

Example c) means that a broken arm is one of many possible injuries. Of course, the sentence does not mean that the patient "is permitted" to have a broken arm! Example d) means, however, that the first responder "is permitted" to help patients who have said that they want help.

Exercise 3

For each problem below, decide if "may" means "possible" or "permitted," and circle the correct choice.

Example: She may fall off the ladder.	(POSSIBLE)	PERMITTED
1. Without proper care, the patient may die.	POSSIBLE	PERMITTED
2. First responders may offer care to children.	POSSIBLE	PERMITTED
3. The patient's family may be frightened.	POSSIBLE	PERMITTED
4. Only certain licensed medical personnel may give medicines to patients.	POSSIBLE	PERMITTED
5. Trained first responders may help patients.	POSSIBLE	PERMITTED
6. The patient may have a head injury.	POSSIBLE	PERMITTED
7. The patient may stop breathing.	POSSIBLE	PERMITTED
8. A bystander may be able to help.	POSSIBLE	PERMITTED
9. Only doctors may set fractured bones.	POSSIBLE	PERMITTED
10. Quick action may save lives.	POSSIBLE	PERMITTED

Exercise 4

For each problem below, change the sentence by using "may" to mean "possible."

Examples: It is possible that the patient has a broken arm.

The patient may have a broken arm.

It is possible that the patient is frightened.

The patient may be frightened.

1. It is possible that the patient needs professional medical help.

2. It is possible that you send a bystander to call an ambulance.

3. It is possible that the patient is unconscious.

4. It is possible that the situation requires fast thinking.

5. It is possible that the patient's heart has stopped.

6. It is possible that you have to direct traffic.

7. It is possible that you have to get information from bystanders.

8. It is possible that you need special equipment.

9. It is possible that you need to control bleeding.

10. It is possible that you need to control activities of bystanders.

11. It is possible that the patient is poisoned.

12. It is possible that the patient is a child.

When you must look at the possibilities in an emergency, another important word to use is "might." In grammar, "might" is the past tense of "may," but it doesn't mean "permitted." It only means "possible." Look at the examples:

e) The doctor may give her some medicine.

f) The doctor might give her some medicine.

Example "e," as we saw earlier, has two meanings: 1) The doctor is permitted to give her some medicine (while other people are not), and 2) It is possible that the doctor will give her some medicine. Example "f" means only that it is "possible that the doctor will give her some medicine."

Exercise 5

Change each of the following into a sentence with "might" to show that something "is possible."

Examples: It is possible that the patient has a broken arm.

The patient might have a broken arm.

It is possible that the patient is frightened.

The patient might be frightened.

1. It is possible that the patient is a child.

2. It is possible that you need to control bleeding.

3. It is possible that you need special equipment.

4. It is possible that the patient's heart has stopped.

5. It is possible that the patient is unconscious.

6. It is possible that the patient needs professional medical help.

7. It is possible that the patient is poisoned.

8. It is possible that the situation requires fast thinking.

9. It is possible that you have to get information from bystanders.

Like "might," another word meaning "possible" is "could." "Could" means a stronger possibility than "might." Look at the examples:

g) She might have a broken arm.

h) She could have a broken arm.

Both examples mean "It is possible that she has a broken arm," but in example "h," that possibility is a little stronger.

Exercise 6

Change each of the following sentences by using "could" instead of "might" to make the possibility stronger.

Example: The patient might be frightened.

The patient could be frightened.

1. You might accidentally injure the patient.

2. You might forget some important information.

3. The patient's breathing might stop.

4. The patient might be poisoned.

5. The patient's heart might stop.

6. Bystanders might create problems.

7. The police might need your help.

8. The patient might be unconscious.

9. The patient might have a head injury.

10. The patient might be bleeding.

11. You might be alone at the scene of the accident.

12. The emergency might be life-threatening.

Another important expression for the first responder is "be able to." Your lessons give many lists of things which a first responder can do. "Be able to" and "can" have very similar meanings, but "be able to" is used with "must" to show that a certain ability is required. Look at the examples:

i) She can swim.

j) She is able to swim.

k) She must be able to swim.

Examples "i" and "j" have similar meanings, but example "k" shows that the ability to swim is <u>necessary</u>.

Exercise 7

Change each example using "must be able to" so that it shows that an ability is necessary.

Example: He can run a mile.

He must be able to run a mile.

1. The first responder can take charge of the situation.

2. The first responder can keep calm while working under pressure.

3. The first responder can organize others.

4. The first responder can stop dangerous bleeding.

5. The first responder can administer emergency medical care.

6. The first responder can remember proper emergency techniques.

7. The first responder can decide what kind of injuries a patient has.

8. The first responder can protect the patient from additional injuries.

9. The first responder can help patients suffering heart attacks.

10. The first responder can assist in emergency childbirth.

Essential Vocabulary and Expressions

first responder	bystander	ambulance
actual consent	unconscious	life-threatening
childbirth	patient assessment	patient
equipment	calm	bleeding

From the list above, fill in the word you think is appropriate for the blank in each problem.

Example: A person who arrives at an accident scene before anyone else is called a *first responder*.

1. A person who needs help at an accident scene is your _____.

2. A _____ is a person who is at the emergency scene, standing nearby, but not injured.

3. The first thing to do is determine how badly the person is injured by making a _____.

4. If the patient is _____ , he will not talk to you.

5. Always send someone to call an _____ if possible.

6. If the patient gives his _____, it means that he gives you "permission" to help him.

7. In _____ situations, the patient might die.

8. If the injured person has an open cut, it might be _____.

9. If the patient is a woman who is going to have her baby, you might need to prepare for _____.

10. You should not be excited. You should be _____.

11. You should not need special machines or _____ to offer help.

Lesson 2

Two ways to explain where things are exist in English. The first is to use the verb "be," as in the example:

a) Several major organs <u>are</u> in the chest cavity.

The other way is to use "there are" or "there is" (depending on whether you are talking about something that's singular or plural). Look at the example:

b) <u>There are</u> several major organs in the chest cavity.

Examples "a" and "b" mean the same thing.

Exercise 1

Change each sentence using "there are" or "there is," whichever is correct.

Examples: Twenty-two bones are in the head.

There are twenty-two bones in the head.

A kidney is on the right side of the abdominal cavity.

There is a kidney on the right side of the abdominal cavity.

1. Major blood vessels are in the abdominal cavity.

2. Two hundred and six bones are in the human skeleton.

3. A movable joint is in the head.

4. Four bones are in the pelvis.

5. A kneecap is in front of the knee joint.

6. A lung is on the left side of the chest cavity.

7. Some digestive juices are in the stomach.

8. Some bones are inside the ear.

9. Fourteen toe bones are in each foot.

In exercise 1, "there is" or "there are" tells the location of something. Sometimes, however, "there is" or "there are" just means that something <u>is</u>. Look at the example:

c) There are several emergency procedures.

The "emergency procedures" which the sentence talks about are not in a particular place. They just "exist." Another use of "there is" or "there are" is to put them in place of "have." The examples below show this:

d) The arm has several sections.

e) There are several sections in the arm.

The examples above still mean "exist." The arm doesn't really "have" anything, but rather the "several sections" <u>are</u>. Using "there is" or "there are" makes this clear.

Exercise 2

Change each of the following by using "there is" or "there are."

Examples: A reason to be careful exists.

There is a reason to be careful.

The lower jaw has sixteen teeth.

There are sixteen teeth in the lower jaw.

1. The human skeleton has three major divisions.

2. The skull has several joints.

3. The skin has three layers.

4. Three types of joints exist.

5. Two types of muscles exist.

6. The abdominal cavity has major organs.

7. The backbone has twenty-four segments.

8. The spine has five sections.

There are several ways to give very accurate descriptions. The easiest is to use adjectives, as in the following example:

f) The first responder must make <u>essential</u> phone calls.

The adjective "essential" in the example shows that the first responder should make not just any phone call, but only essential, or "necessary" ones. Another way to make information very specific is to use groups of words with "which," "who," or "that" to provide details. Here's an example:

g) It is a situation <u>that requires fast thinking</u>.

The example is talking about a specific situation -- only one that requires fast thinking.

Exercise 3

Combine the following sentences using "that" to provide specific details.

Example: Be careful of joints.
Joints are commonly injured.
Be careful of joints that are commonly injured.

1. The foot contains bones.
   The bones sometimes break.

2. The heart is a muscle.
   The muscle functions automatically.

3. The rib cage is formed by twelve pairs of ribs.
   The ribs are attached in the back to vertebrae.

4. The knee, ankle, and elbow are joints.
   The joints are movable.

5. The skull is a case.
   The case protects the brain.

6. The skin serves many protective functions.
   The functions are important for good health.

7. The digestive system consists of organs.
   The organs permit us to eat and digest foods.

In the problems of exercise 3, we used "that" to introduce "specific" information, but, as you already know, we could also use "which" or "who." Look at the following:

h) She gives emergency care to a patient who is bleeding.

i) The arms contain muscles which are consciously controlled.

In sentence "h," we use "who" because "who is bleeding" tells about "patient" -- a person. In sentence "i," we use "which" because "which are consciously controlled" tells about "muscles" -- a thing.

Exercise 4

Combine each pair of sentences using "which" or "who."

Examples: The first responder saw a bystander.
The bystander could help.

The first responder saw a bystander who could help.

The first responder must look for wounds.
The wounds are bleeding.

The first responder must look for wounds which are bleeding

1. The human skeleton has 206 bones.
   The bones are classified according to shape.

2. The head contains a joint.
   The joint is movable.

3. A first responder is the person.
   The person arrives first at an accident.

4. The skin is an important covering.
   The covering protects the body.

5. The abdomen is the portion of the body.
   The portion of the body contains the stomach.

6. A first responder should not leave a patient.
   The patient needs emergency care.

7. The spine contains joints.
   The joints are slightly movable.

Information that describes something specifically (like the "which" and "who" ideas above) follows directly after the word it talks about. Look at the following examples:

j) The heart is a muscle which pumps blood.

k) Some joints which are immovable are in the skull.

In example "j," the words "which pumps blood" come at the end of the sentence, because they are talking about "muscle," the last word. In example "k," the words "which are immovable" talk about "joints," a word that comes in the middle of the sentence "Some joints are in the skull." For this reason, "which are immovable" belongs next to "joints" in the middle of the sentence.

Exercise 5

Change each pair below using "who" or "which." Be sure to put words in the middle if they go there.

Example: People sometimes don't know what to do.
People arrive first at an accident.

People who arrive first at an accident sometimes don't know what to do.

1. Patients depend on first responders.
   Patients need emergency care.

2. You may need a bystander.
   A bystander can help you.

3. You are studying some emergency skills.
   You will need some emergency skills.

4. The joints are freely movable.
   The joints are most frequently injured.

5. The bones are called the "spinal column."
   The bones protect the spinal cord.

6. The diaphragm is a muscle.
   The muscle moves up and down during breathing.

7. The patient feels pain through nerves.
   Nerves are located in the skin.

8. Body areas hold internal organs.
   Body areas are called "cavities."

9. The head joint is the lower jaw.
   The head joint is movable.

10. The cavity is the abdomen.
    The cavity contains the liver.

11. The lungs obtain oxygen.
    Oxygen is necessary for life.

12. Tendons are strong cords.
    Cords attach muscles to the bones.

13. The cavity is called the "cranial cavity."
    The cavity holds the brain.

14. A patient often should not move.
    A patient is injured.

15. The spine contains joints.
    The joints are slightly movable.

16. The bone is called the "breastbone."
    The bone protects the heart.

17. The diaphragm is an organ.
    The organ helps in breathing.

18. Parts of the body are called "extremities."
    Parts of the body include arms and legs.

19. The organ is the skin.
    The organ keeps germs out of the body.

20. The organs carry blood through the body.
    The organs are called the "circulatory system."

Now consider the following two sentences to be put together:

1) The lung is slightly small.
   The lung is on the left side of the body.

If we use "which," we get a sentence like "The lung which is on the left side of the body is slightly small." The body has <u>two</u> lungs, so we need to know <u>which one</u> is the one that is slightly small. The information in the "which" part of the sentence is absolutely necessary. Without it, we would not know whether it was the right lung or the left lung that was slightly small. Now consider:

m) The skull has immovable joints.
   The skull protects the brain.

There is <u>only one</u> skull. Extra information, like "which protects the brain," isn't necessary, although it can be helpful. When the piece of information <u>isn't necessary</u>, it has a comma in front of it, and a comma behind it, like this:

n) The skull, which protects the brain, has immovable joints.

In example "n," it is easy to see that the information in the "which" part of the sentence isn't necessary, because the sentence is talking about a "skull," and there is only <u>one</u> of it. Obviously, the body has many toes and fingers, two eyes, two ears, two legs, two kidneys, and two or more of many other organs. When the information in the "which" part of the sentence helps us to decide the correct one (i.e., the left arm or the right one?) then we do not put a comma either before or after that information.

Exercise 6

For each problem below, decide if the information in the "which" part of the sentence is necessary. If it is <u>NOT</u> necessary, put a comma before and a comma after the unnecessary information.

Examples: A patient who is injured must receive care. (no commas)

The diaphragm, which helps in breathing, is a muscle.

1. The human skeleton which is composed of 206 bones supports the body.

2. The head which has only one movable joint is a division of the skeleton.

3. The nervous system which controls body activities includes the brain.

4. The arm which was injured required medical treatment.

5. The organ which pumps blood is the heart.

6. The skin which covers the body helps control body temperature.

7. The chest cavity which is cone-shaped contains the lungs.

8. The liver which is in the abdomen helps in digestion.

9. A kidney which has been injured may not perform its function.

10. The pelvic cavity which protects the lower abdomen is above the legs.

In Exercise 6 we saw that commas come in front of and after information that is <u>not necessary</u>. If there is only one of something, like the head, the stomach, or the liver, then it is not necessary to tell "which one," so we use commas. If there are two or more of it, as with kidneys, toes, bones, and eyes, then we need to know "which one," so we do NOT put in commas. Sometimes information is not necessary, even if the item being talked about is plural. Look at the following:

o) Joints, which are composed of two or more bones coming together, are of three types.

p) Joints which are freely immovable are most frequently injured.

Both of the sentences above talk about "joints" (something that there are many of), but example "o" contains unnecessary information. <u>All</u> joints are composed of two or more bones coming together, so no additional description is needed. In example "p," the "which" information is required, because only <u>some</u> joints are most frequently injured -- the "freely movable" ones.

Exercise 7

In each problem below there is a pair of sentences. One of the sentences contains "unnecessary" information that should have a comma in front of it and a comma behind it. Put in the commas where they are needed.

Example: Bones which come together form joints. (no commas)

Bones, which are the framework of the body, sometimes break.

1. Toes which contain bones extend from the feet.

Toes which have broken should be covered with a bandage.

2. Kidneys which are part of the excretory system extract waste products.
   Kidneys which fail to function can endanger a patient.

3. Blood vessels which carry blood through the body include arteries.
   Blood vessels which are extremely small are called "capillaries."

4. Muscles which are not consciously controlled are called "involuntary."
   Muscles which permit us to move are attached to bones by tendons.

5. Teeth which are found in the jaw are similar to bones.
   Teeth which have broken in an accident can bleed.

6. Muscles which control breathing are "involuntary."
   Muscles which are found throughout the body can contract themselves.

7. Tendons which attach muscles to bones are strong cords.
   Tendons which have been injured can cause pain to patients.

8. Veins which transport blood are part of the circulatory system.
   Veins which have been cut must be treated by the first responder.

Essential Vocabulary and Expressions

cavity	skeleton	joint
vertebrae	skull	consciously
wound	immovable	diaphragm
tendons	extremities	veins

1. An injury is also called a _____.

2. Structures that extend outward from the body, like arms and legs, are called _____.

3. The _____ is the group of 206 bones which support the body.

4. _____ are blood vessels which carry blood toward the heart.

5. Where two or more bones come together, a _____ is formed.

6. The large muscle which helps in breathing is called the _____.

7. The group of bones which make up the spinal column are _____.

8. A _____ is an open place in which organs are located.

9. Protecting the brain, the _____ is made of eight bones.

10. To do something _____ means to do it on purpose, while thinking about it.

11. Strong cords, or _____ , connect muscles to bones.

12. _____ joints do not move.

Lesson 3

Sometimes "which" works with prepositions (words like "of," "in," "on," "with," and many others). Look at the following example:

a) The lungs are in the chest cavity.
The heart is also located in the chest cavity.

There are two possible ways to use "which" to connect the sentences of the example. One way is the way you already know:

b) The lungs are in the chest cavity, which the heart is also located in.

The other way is to move the preposition "in" with "which," so that they are together in the middle of the sentence:

c) The lungs are in the chest cavity, in which the heart is also located.

Exercise 1

Change each problem below so that the preposition at the end is moved to the middle of the sentence, in front of "which."

Example: The skin is the organ which sweat is released through.

The skin is the organ through which sweat is released.

1. Voluntary muscles are those which arms and legs are controlled by.

2. Tendons are the cords which muscles are connected to.

3. The abdomen is the body cavity which the spleen is located in.

4. The diaphragm is the muscle which people breathe with.

5. Arteries are vessels which blood flows through.

6. The skull is the structure which the brain is protected by.

7. Oxygen is the human need which life depends on.

8. Eyes are the organs which people receive most information with.

As with the "which" groups we looked at earlier, sometimes the information is necessary, and sometimes not. Sometimes the "which" information belongs in the middle of a sentence, and sometimes not. Look at these examples:

d) The lungs, by which we breathe, are in the chest cavity.
e) Most of the chest cavity is the lungs, by which we breathe.
f) Small vessels through which blood passes include capillaries.
g) There are many small vessels through which blood passes.

In examples "d" and "e," the idea "by which we breathe" is not necessary, so there are commas separating it from the rest of the sentence. In examples "f" and "g," the idea "through which blood passes" is a necessary idea, identifying which particular vessels. There are, therefore, no commas.

Exercise 2

In each problem below you are given two sentences. Use the SECOND sentence as a "which" idea, and put the two sentences together. Use commas if necessary. Put the second in the middle of the first, if necessary.

Examples: a) The head is composed of 22 bones.
Eight of the bones unite to form the skull.

The head is composed of 22 bones, eight of which unite to form the skull.

b) The "circulatory system" is composed of organs.
Blood is circulated by the organs.

The circulatory system is composed of organs by which blood is circulated.

1. The spinal column is composed of thirty-three vertebrae.
The spinal cord is protected in the spinal column.

2. The first responder must observe the conditions.
The patient was found under the conditions.

3. "Involuntary" describes muscles.
People don't have conscious control over the muscles.

4. Freely movable joints include the knee and the elbow.
Most injuries happen to freely movable joints.

5. Tendons are cords.
   Muscles are attached to bones by cords.

6. The skin is the part of the body.
   The sweat glands are located in the part of the body.

7. The diaphragm helps in breathing.
   The chest and abdominal cavities are separated by the diaphragm.

8. The chest cavity is the area.
   The lungs and heart are located in the area.

9. The abdominal cavity is surrounded by muscles.
   The stomach is located in the abdominal cavity.

10. The excretory system contains important organs.
    Waste products are eliminated by the organs.

11. Capillaries have very thin walls.
    Blood passes through capillaries.

12. A first responder must always be prepared for emergencies.
    She might be involved in the emergencies.

13. Accidents are often less severe.
    You are prepared for the accidents.

14. The first responder should not leave the area.
    An injured patient needs help in the area.

15. The chest cavity is a body area.
    There are rib bones around the body area.

16. The spinal cord carries messages from the brain.
    The vertebrae surround the spinal cord.

17. The heart is an involuntary muscle.
    The blood passes through the heart.

18. Accidents generally present serious conditions.
    The first responder must work under the conditions.

Consider now the following example of two sentences which we want to change into one using "which" :

h) The pelvic cavity is bounded by the hip bones.
The pelvic cavity's contents include the bladder.

It is not correct to say *"The pelvic cavity, which contents include the bladder, is bounded by the hip bones." This form forgets the fact that the words "The pelvic cavity" are <u>possessive</u> in the second sentence. They are followed by: 's. In order to show this possessive idea, we use "whose" instead of "which." The correct form for the sentence is:

i) The pelvic cavity, <u>whose</u> contents include the bladder, is bounded by the hip bones.

Special note: "whose" is used in place of <u>either</u> "which" or "who," when it is necessary to show "possessive."

Exercise 3

Change the pairs of sentences below by using "whose."

Example: The skeleton is composed of about 206 bones.
The skeleton's function is to support the body.

The skeleton, whose function is to support the body, is composed of about 206 bones.

1. A muscle is called "involuntary."
The muscle's movements are not consciously controlled.

2. A small blood vessel is called a capillary.
The blood vessel's thin walls permit blood to pass through.

3. The skin keeps germs out.
The skin's function is to protect the body.

4. The abdominal cavity is below the diaphragm.
The abdominal cavity's organs include the liver.

5. A bystander should be asked about any accident.
The bystander's information may be important.

6. The heart is a major organ of the circulatory system.
The heart's walls are involuntary muscle.

Exercise 4
Review: Should

Change each of the following into a sentence with "should," to show that the first responder does it <u>if possible</u>.

Example: The first responder performs a primary survey.

The first responder should perform a primary survey.

1. She knows the systems of the body.

2. The first responder helps medical professionals at the emergency scene.

3. He makes the patient as comfortable as possible.

4. The first responder follows accepted emergency care procedures.

5. She recognizes life-threatening problems.

6. The first responder controls the activities of bystanders.

7. He arranges for medical assistance.

8. The first responder avoids adding injuries to the patient.

9. She remains calm.

10. The first responder helps police if necessary.

11. He continues emergency care until an ambulance arrives.

12. The first responder collects important medical information.

13. She always knows the most recent emergency help techniques.

14. The first responder sends a bystander to call for help.

15. He takes vitals on the patient.

Exercise 5
Review: Should Not

Change each of the following into a sentence with "should not," to show that the first responder tries NOT to perform the action if possible.

Example: The first responder doesn't move the patient.

The first responder should not move the patient.

1. He doesn't wait for an ambulance before starting emergency help.

2. The first responder doesn't leave the patient alone.

3. She doesn't stop helping the patient before qualified help arrives.

4. The first responder doesn't get excited or upset.

5. He doesn't forget to talk to the patient about his condition.

6. The first responder doesn't frighten the patient.

7. She doesn't forget to ask bystanders to help.

8. The first responder doesn't add injuries to the patient.

9. He doesn't ignore the instructions of police or other officials.

10. She doesn't say things that will frighten the patient.

11. He doesn't permit bystanders to be injured.

12. She doesn't fail to recognize life-threatening problems.

13. The first responder doesn't ignore the laws regarding emergency help.

14. He doesn't forget the proper procedures of emergency care.

15. She doesn't needlessly risk injury to herself.

As you remember, "may" has two meanings. It means "possible," as in:

j) She may fall off the ladder.

It also means "permitted," as in:

k) Only doctors may give medicines to patients.

Exercise 6
Review: May (meaning "possible")

Change each sentence below by using "may" to mean "possible."

Example: It is possible that the patient will die without proper care.
The patient may die without proper care.

1. It is possible that the patient's family is frightened.

2. It is possible that the patient has a head injury.

3. It is possible that the patient will stop breathing.

4. It is possible that a bystander will be able to help.

5. It is possible that quick action will save lives.

6. It is possible that the patient has a broken arm.

7. It is possible that a bystander will go to call an ambulance.

8. It is possible that you have to help direct traffic.

9. It is possible that you need special equipment.

10. It is possible that the patient has swallowed poison.

11. It is possible that the patient is a child.

12. It is possible that the situation calls for medical professionals.

You remember that "might" and "could" both mean something similar to "it is possible," but "could" is a little stronger than "might."

Exercise 7
Review: Could and Might

Change each sentence below in two ways. First use "might," then show a stronger possibility with "could."

Example: It is possible that the patient is a child.

1. The patient might be a child.
2. The patient could be a child.

1. It is possible that the situation requires fast thinking.

   1.

   2.

2. It is possible that the patient is unconscious.

   1.

   2.

3. It is possible that you need to control bleeding.

   1.

   2.

4. It is possible that the patient has a head injury.

   1.

   2.

5. It is possible that the patient is in cardiac arrest.

   1.

   2.

6. It is possible that the patient needs professional medical help.

   1.

   2.

Exercise 8
Review: Must Be Able To

In each problem below, replace "can" with "must be able to" in order to show the abilities that a first responder is required to have.

Example: He can run a mile.

He must be able to run a mile.

1. She can help with emergency childbirth.

2. He can control the activities of bystanders.

3. The first responder can recognize when a person is choking.

4. The first responder can remain calm.

5. She can help patients who have suffered a heart attack.

6. He can organize others to help in the emergency.

7. She can protect the patient from additional injuries.

8. The first responder can stop dangerous bleeding.

9. He can conduct a primary survey.

10. She can remember proper emergency techniques.

11. The first responder can prevent unnecessary injury to the patient.

12. He can decide what kind of injuries the patient has.

13. The first responder can gain access to the patient.

14. She can use medical terminology.

Lesson 4

As a first responder, you will have many occasions when you must give instructions to other people, or you will receive instructions from police, firefighters, or medical personnel. Using the correct form of the command will help your patients understand you, and knowing it will help you understand others. Look now at the following example:

a) You listen carefully.

b) Listen carefully!

Sentence "a" in the example is a statement. It tells about something that you always do. Maybe you are doing it now, or maybe you aren't. Sentence "b" of the example is a command. It tells you something you should do now.

Exercise 1

Change the following statements into commands.

Example: You look to see if the patient is breathing.

Look to see if the patient is breathing.

1. You control any bleeding.

2. You feel the carotid pulse.

3. You stabilize any head injuries.

4. You cooperate with medical personnel.

5. You prepare properly for emergencies.

6. You treat for shock.

7. You assist in emergency childbirth.

8. You identify life-threatening problems.

9. You make an overview of the accident scene.

10. You protect bystanders from potential hazards.

For most verbs, like those in exercise 1, the form is the same for a "you" statement ("You speak slowly.") and a command form ("Speak slowly!") One verb, however, has a different form. Look at the example:

c) You are careful.

d) Be careful!

In addition to leaving out the unnecessary "you," the command form changes the verb from "are" to "be."

Exercise 2

Change the following sentences into the command form.

Example: You are polite to the patient.

Be polite to the patient.

1. You are careful about moving an accident victim.

2. You are alert for signs of life-threatening problems.

3. You listen carefully to information from bystanders.

4. You inform the patient of what you will do.

5. You are prepared for emergencies.

6. You are ready to help medical personnel when they arrive.

7. You feel a pulse for thirty seconds.

8. You prevent the loss of the patient's body heat.

9. You observe the patient for unresponsiveness.

10. You check the patient's mouth for foreign objects.

11. You are ready for the patient's reactions.

12. You are ready to transfer care to other medical personnel.

Exercises 1 and 2 show the form for commands telling people things they should do. There is also, of course, a command telling people NOT to do something.

e) Swim alone.

f) Do not swim alone.

In the example, sentence "f" is the correct command. It is also possible to use the short form "don't" instead of "do not" as in "g" below:

g) Don't swim alone.

Exercise 3

Change each of the commands to negative, using "do not" or "don't."

Example: Cover a tourniquet.

Do not cover a tourniquet.

1. Overestimate your ability to swim.

2. Take time to move the patient.

3. Delay ventilation.

4. Fight the patient's attempts to breathe.

5. Allow children to run about when they are eating.

6. Smoke cigarettes.

7. Allow loss of the patient's body heat.

8. Feed the patient.

9. Attempt to remove foreign objects embedded in wounds.

10. Frighten the patient.

11. Leave the patient alone while you call the ambulance.

Usually, a command form tells the person receiving the command to do something, as in this example:

h) Move your shoulders over the patient's abdomen.

Sometimes, however, the command tells the receiver to cause <u>someone else</u> to do something:

i) Make the patient lie down.

In the example above, the command tells you to cause the patient to do something -- lie down.

Exercise 4

Change the following sentences using "make" to instruct someone to cause <u>someone else</u> to perform the action.

Example: Others direct traffic.

Make others direct traffic.

1. Someone goes to telephone an ambulance.

2. The patient breathes into a paper bag.

3. The patient sits down.

4. The patient places his head between his knees.

5. The patient keeps her head lower than her feet.

6. Someone keeps pressure on bleeding wounds.

7. The patient keeps warm.

8. Bystanders are quiet.

9. Someone directs the ambulance to the accident scene.

10. Someone protects the patient from additional injuries.

11. The patient relaxes.

There are actually two ways to use commands that mean "cause someone else to do something." The ones in exercise 4 use the "make" form, as in the example below:

j) Make the patient sit down.

The other command uses "have," as in this example:

k) Have the patient sit down.

The "have" form and the "make" form mean the same thing, but the "have" form is a little less forceful and more polite.

Exercise 5

Change the following sentences using "have" to instruct someone to cause someone else to perform the action.

Example: Others direct traffic.

Have others direct traffic.

1. Someone goes to telephone an ambulance.

2. The patient breathes into a paper bag.

3. The patient sits down.

4. The patient places his head between his knees.

5. The patient keeps her head lower than her feet.

6. Someone keeps pressure on bleeding wounds.

7. The patient keeps warm.

8. Bystanders are quiet.

9. Someone directs the ambulance to the accident scene.

10. Someone protects the patient from additional injuries.

11. The patient relaxes.

In exercise 3, we looked at negative commands like the following:

1) Do not remove the original wound dressing.

Sometimes a negative command is much stronger than normal. In those cases, the command looks like this:

m) Never swim alone.

"Never" is used in place of "do not" to show that the negative command is very strong.

Exercise 6

Change the following sentences into very strong negative commands using "never."

Example: Use wire for a tourniquet.

Never use wire for a tourniquet.

1. Give a shock patient a drink.

2. Wait for an ambulance before giving emergency treatment.

3. Leave a patient alone.

4. Stop helping a patient before medical professionals arrive.

5. Move a patient needlessly.

6. Allow bystanders to interfere with emergency procedures.

7. Take the pulse for less than thirty seconds.

8. Lift a heavy patient by yourself.

9. Delay treatment so that the patient goes into shock.

10. Perform procedures beyond the scope of your training.

11. Ignore the instructions of medical professionals.

Essential Vocabulary and Expressions

constrict	vital	toxic
allergic	hives	carotid
tourniquet	embedded	internal
hemorrhage	severed	bandage

1. Material used to wrap a wound is a _____ .

2. _____ means "extremely important," or "main."

3. Another word for "bleeding" is _____ .

4. If a patient reacts strongly to a substance which doesn't affect other people, he might be _____ to it.

5. _____ are patches of skin that itch and swell.

6. Another word for "pushed inside" is _____ .

7. The main artery in the neck is the _____ artery.

8. When blood vessels become smaller they _____ .

9. _____ means "inside."

10. A blood vessel that is leaking has been cut or _____ .

11. A _____ is used to control excessive bleeding.

12. Another word for _____ is "poisonous."

Lesson 5

You already know that description words (adjectives) have several forms, as the examples below show:

a) The first patient has <u>low</u> blood pressure.

b) The second patient has <u>lower</u> blood pressure than the first.

c) The third patient has the <u>lowest</u> blood pressure of all.

The form of "low" in example "b" is the "comparative." You probably already know that it is formed by adding "er" to short adjectives.

Exercise 1

Change each problem below to the "comparative."

Example: Capillaries are [+small] than arteries.

Capillaries are smaller than arteries.

1. The patient will be [+warm] under a blanket.

2. In shock, the patient's pulse becomes [+weak].

3. A patient in shock has a [+pale] skin color than a non-shock patient.

4. The urinary bladder is [+low] than the gall bladder.

5. The reactions of a shock patient are [+slow].

6. The [+late] stages of shock can be life-threatening.

7. The brachial pulse is [+close] to the midline than the radial.

8. Lungs are [+close] to the heart than the brain.

9. The patient's feet should be [+high] than his heart.

10. Pupils not receiving enough oxygen react [+slow].

11. The diastolic should be [+low] than the systolic.

Now consider the following description of an accident scene:

The first patient had a weaker pulse, but the second patient's injuries were more severe.

A few of the descriptive words used in emergency care, like "weak" in the example above, are short, and use the "er" comparative form. Some, however, like "severe," are longer, and form the comparative with "more."

Exercise 2

Change each problem below to the comparative.

Example: The reactions of some patients will be [+gradual].

The reactions of some patients will be more gradual.

1. Additional help is [+prompt] when you activate the EMS immediately.

2. Some substances are [+toxic] to the patient than others.

3. Examine the [+severe] wounds first.

4. Some of the patient's injuries will be [+superficial] than others.

5. The danger from shock may be [+immediate] than danger from injuries.

6. Loss of too much blood causes [+acute] problems.

7. Internal injuries produce a [+tender] area of the patient's body.

8. The patient's breathing becomes [+shallow].

9. Bleeding internally gives the patient a [+rapid] pulse.

10. The effects of shock may be [+traumatic] than those of the injury.

11. The patient will be [+comfortable] lying on a blanket.

12. [+peripheral] areas of the body may suffer vascular collapse.

Exercise 3

Combine each pair of ideas in the problems below. Use the "er" form or the "more" form of the comparative, whichever is needed.

Examples: The pulse rate of a shock patient is [+slow].
The pulse rate of a patient who is not in shock is [-slow]

The pulse rate of a shock patient is slower than the pulse rate of a patient who is not in shock.

The reaction of the patient to some treatments is [+gradual].
The reaction of the patient to other treatments is [-gradual].

The reaction of the patient to some treatments is more gradual than the reaction of the patient to other treatments.

1. The pulse of a shock patient is [+weak].
   The pulse of a non-shock patient is [-weak].

2. Late stages of shock are [+serious].
   Early stages of shock are [-serious].

3. Some substances are [+toxic].
   Other substances are [-toxic].

4. A shock patient has [+pale] skin.
   A non-shock patient has [-pale] skin.

5. Some wounds which appear dangerous are [+superficial].
   Some wounds which do not appear dangerous are [-superficial].

6. Cardiac arrest is [+serious].
   Respiratory arrest is [-serious].

7. Some cases of shock are [+acute].
   Other cases of shock are [-acute].

There are some adjectives, like "asleep," that have no comparative form. Look at the sentence below:

*This patient is more asleep than that one.

The example sentence sounds foolish, because a patient is either asleep or he isn't. There are no "degrees" of being asleep. A number of emergency medical vocabulary words have that same "absolute" kind of meaning.

Exercise 4

In each problem below, put a check mark in the space if the word has an "absolute" meaning, and has no comparative form. If there <u>is</u> a comparative form for the word, leave the answer space blank.

Example: low ____
main ✓
late ____
voluntary ✓

1. prompt ____
2. vital ____
3. pale ____
4. irreversible ____
5. gradual ____
6. weak ____
7. slow ____
8. small ____
9. conscious ____
10. rough ____
11. low ____
12. firm ____
13. chronic ____
14. fatal ____
15. close ____

The comparative, as you have seen, is formed by using "er," or, with longer words, "more."

d) These wounds are more superficial than those wounds.

We might guess that the opposite of "more superficial" would be "less superficial." Sometimes "less" can be used in a comparative, but the most common way to express the opposite of a comparative is by using "not as ... as" like this:

e) These wounds are not as superficial as those wounds.

Notice that "not as" comes in front of the description word, and another "as" comes after it. Also, remember that "not as ... as" is the opposite of both comparatives that end in "er" and those that use "more."

Exercise 5

Change each of the following to its opposite, using "not as ... as."

Example: The patient's pulse is slower than it was a few minutes ago.

The patient's pulse is not as slow as it was a few minutes ago.

This injury is more severe than that one.

This injury is not as severe as that one.

1. Some bystanders are more helpful than others.

2. This patient's skin is paler than that patient's skin.

3. Now the blood pressure is lower than it was a while ago.

4. Sometimes the signs of shock are more gradual than you expect.

5. Bleeding from some wounds is more serious than from other wounds.

6. Some substances are more toxic than others.

7. There are bacteria which are more pathogenic than others.

8. This patient's pulse is weaker than that patient's pulse.

Earlier we saw that many short adjectives form the comparative by adding "er."

f) Leg muscles are often <u>stronger</u> than arm muscles.

Some of these short adjectives have another quality. It is possible to change them into verbs by adding "en." Look at the example below:

g) The wound can <u>become deep</u>.

h) The wound can <u>deepen</u>.

Sentences "g" and "h" both mean the same thing. By adding "en" to the word "deep," we can make a verb that means "become deep."

Exercise 6

Make a verb from each given adjective in the exercise by adding "en."

Example: become quick quicken

1. become sharp _____

2. become loose _____

3. become red _____

4. become weak _____

5. become wide _____

6. become bright _____

7. become white _____

8. become tough _____

9. become smooth _____

10. become sweet _____

11. become tight _____

The special verb form which we saw in exercise 6 is used in two ways. Look at the following examples:

i) The skin <u>becomes red</u>.
The skin <u>reddens</u>.

j) <u>Make</u> the response time <u>short</u>.
<u>Shorten</u> the response time.

In example "i," the skin "makes itself red." Example "j" is a command form. A person following the command must make the response time short. The "en" verb formed from an adjective has both of these uses.

Exercise 7

Change each sentence below using an "en" verb form.

Example: The patient's heartbeat <u>becomes quick</u>.

The patient's heartbeat quickens.

<u>Make</u> the patient's contact with the ground <u>soft</u>.

Soften the patient's contact with the ground.

1. In cases of shock, the patient's pulse <u>becomes weak</u>.

2. <u>Make</u> the patient's clothing <u>loose</u>.

3. Skin areas near insect stings may <u>become red</u>.

4. The patient's breath may <u>become short</u>.

5. Careless movements may <u>make</u> a patient's wounds <u>worse</u>.

6. As the patient goes into shock, his skin pales and <u>becomes white</u>.

7. <u>Make</u> the patient's collar <u>wide</u> to ease breathing.

8. As the patient regains consciousness, his senses <u>become sharp</u>.

9. <u>Make</u> the time of arrival of the ambulance <u>short</u> as much as possible.

10. In cardiac arrest, the patient's pupils sometimes <u>become wide</u>.

Essential Vocabulary and Expressions

shock	prompt	superficial
tender	peripheral	gradual
fatal	irreversible	pale
pathogenic	pulse	symptoms

1. If blood doesn't circulate completely, the patient suffers _____.

2. Something that causes a disease is called _____ .

3. A _____ patient shows poor skin color.

4. The opposite of "rapid" is _____ .

5. A place on the patient's body which hurts when you touch it is said to be _____ .

6. _____ refers to something that causes death.

7. The regular push of blood through the arteries is called the _____ .

8. If a reaction is quick and timely, it is _____ .

9. _____ wounds are on the surface.

10. A condition that cannot be changed back is _____ .

11. _____ are abnormal feelings of sickness or injury.

12. _____ means "on the edge of" or "outside of."

Lesson 6

Exercise 1
Review: Commands

Change the following statements into commands.

Example: You look to see if the patient is breathing.

Look to see if the patient is breathing.

1. You protect the patient from additional injury.

2. You carefully perform a primary survey.

3. You ask a bystander to call the EMS.

4. You stabilize any head injuries.

5. You assess the mechanism of injury

6. You lift heavy objects with the strength of your legs

7. You assist with emergency childbirth.

8. You examine the patient for signs of shock.

9. You are aware of proper procedures.

10. You discuss with your partner the priorities of treatment.

11. You get a medical history from the patient.

12. You ask someone to help direct traffic.

13. You immobilize a fracture.

14. You are prepared for any emergency.

Exercise 2
Review: Negative Commands

Change each of the commands to negative, using "do not" or "don't."

Example: Cover a tourniquet.

Do not cover a tourniquet.

1. Leave the patient in order to direct traffic.

2. Stop CPR even though you are tired.

3. Excite or frighten the patient.

4. Move the patient before conducting a primary survey.

5. Remove foreign objects embedded in wounds.

6. Delay treatment for shock.

7. Give a drink to a shock patient.

8. Fight the patient's attempts to breathe.

9. Allow the patient to become too cold or hot.

10. Allow children to run about when they are eating.

11. Leave before transferring the care of the patient.

12. Perform abdominal thrusts on infants.

13. Place bystanders in danger.

14. Overestimate your ability to swim.

15. Use wire for a tourniquet.

Exercise 3
Review: "Have" Commands

Change each of the following sentences into a command using "have."

Example: Others direct traffic.

Have others direct traffic.

1. Bystanders are quiet.

2. The patient breathes into a paper bag.

3. The patient keeps his head lower than his feet.

4. Someone keeps pressure on bleeding wounds.

5. The patient sits down.

6. The patient tells you where it hurts.

Exercise 4
Review: "Never" Commands

Change each sentence into a strong negative command using "never."

Example: Give food to a shock patient.

Never give food to a shock patient.

1. Ignore the instructions of medical professionals.

2. Wait for the EMS before starting emergency treatment.

3. Force treatment on a patient.

4. Cause the patient to suffer additional injuries.

5. Allow bystanders to interfere with emergency procedures.

6. Move a patient needlessly.

Exercise 5
Review: Comparatives

Change each problem below into the comparative using "more" or "er," whichever is needed.

Example: The patient will be [+comfortable] lying on a blanket.

The patient will be more comfortable lying on a blanket.

1. [+peripheral] body areas become cold quickly.

2. A shock patient's pulse becomes [+weak].

3. The patient's feet should be [+high] than his heart.

4. In shock, the patient's breathing becomes [+shallow].

5. Problems caused by shock may be [+traumatic] than those of the injury.

6. Internal bleeding may result in a [+rapid] pulse.

7. The [+late] stages of shock become very serious.

8. Examine the [+severe] wounds as quickly as possible.

9. Some of the injuries will be [+superficial] than others.

10. Some appearances of shock symptoms are [+gradual].

11. Too much blood loss causes [+acute] problems.

12. Avoid touching the [+tender] injuries.

13. Some substances are [+toxic] than others.

14. [+pale] than normal skin color is one symptom of shock.

15. Moving of patients should never be [+rough] than necessary.

Exercise 6
Review: "Not As ... As" Comparatives

Change each of the following to its opposite, using "not as ... as."

Example: Some bystanders are more helpful than others.

Some bystanders are not as helpful as others.

1. The pain from some injuries is more acute than the pain from others.

2. Now the pulse is weaker than it was a few minutes ago.

3. Some bacteria are more pathogenic than others.

4. Sometimes the signs of shock are more gradual than you expect.

5. This patient's injuries are more severe than that patient's injuries.

6. One patient is paler than he was a few moments ago.

Exercise 7
Review: Verb Formation with "en"

Make a verb from each adjective below by adding "en."

Example: become sweet

sweeten

1. become smooth _____

2. become loose _____

3. become weak _____

4. become wide _____

5. become red _____

6. become sharp _____

Exercise 8
Review: Using "en" Verbs

Change each sentence below using an "en" verb form.

Example: Make the ambulance arrival time short as much as possible.

Shorten the ambulance arrival time as much as possible.

1. Make the patient's necktie loose.

2. The patient's pulse may become weak.

3. The patient's breath may become short.

4. Never do anything to make the patient's wounds deep.

5. In shock the patient's skin may become white and appear pale.

6. Bandages should not become loose by themselves.

7. Internal bleeding may cause the patient's heartbeat to become quick.

8. Areas of skin near insect bites often become red.

9. Make the patient's collar wide to ease breathing.

10. Make the patient's contact with the ground soft.

11. The reactions of a patient returning to consciousness become sharp.

12. If possible, make the work area bright to assist medical personnel.

13. In cardiac arrest, the patient's pupils become wide.

14. Some sicknesses cause the patient to generally become weak.

15. The patient's skin may become red as the result of an allergy.

Lesson 7

While conducting a patient survey, the first responder must get information about the patient's condition from the patient himself and from bystanders. It is necessary not only to ask the right questions, but also to ask them in the right way, so that people understand them and answer them correctly. The "right way" is to use "closed ended" questions. They have "yes" and "no" answers.

The form for "closed ended" questions depends on the verb that is in them.

Look at the following example:

a) The patient is alert.

b) Is the patient alert?

Sentences which use forms of the verb "be" (am, is, are, was, were), like the one in example "a" above, form their question by moving the verb to the front of the sentence, as in example "b."

Exercise 1

Change each sentence into a "yes/no" question.

Example: The patient is in shock.

Is the patient in shock?

1. Bottles of medication are nearby.

2. The pain is sharp.

3. The patient is breathing.

4. Bones are fractured.

5. Someone is calling the EMS.

6. The patient's pulse is weak.

7. The patient is unconscious.

8. A bystander is directing traffic.

Like forms of "be," auxiliaries (can, could, shall, should, may, might, must, have, will, would, and a few others) form "yes/no" questions by moving to the front of their sentence. The examples demonstrate this:

c) The patient can breathe.

d) Can the patient breathe?

Exercise 2

Change each sentence below into a "yes/no" question.

Example: Someone has called the EMS.

Has someone called the EMS?

1. The patient should sit down.

2. The patient can move.

3. The patient has had food recently.

4. The patient will regain consciousness.

5. The patient can breathe.

6. The patient has taken medicine.

7. Someone will hold a bandage to stop the bleeding.

8. The patient could go into shock.

9. You should elevate the extremities.

10. The patient might feel weak.

11. The pulse will be rapid.

12. She can suffer internal injuries.

Except for the forms of "be" and the auxiliaries, all other verbs of English form "yes/no" questions with "do," "does," or "did." Look at the examples:

e) Many people die from heart attacks.

f) Do many people die from heart attacks?

g) She gets regular exercise.

h) Does she get regular exercise?

i) Someone called the EMS.

j) Did someone call the EMS?

For verbs in PAST, the "yes/no" question uses "did."

Exercise 3

Change each of the following into a "yes/no" question with "did."

Example: The patient went into shock.

Did the patient go into shock?

1. He forgot his doctor's advice.

2. He ate a balanced diet.

3. He had a heart attack.

4. He felt pain in his chest.

5. The first responder checked breathing and circulation.

6. The head injury required hospitalization.

7. He compressed the patient's sternum.

8. The patient started breathing.

For verbs in PRESENT, make questions with "do" if the subject is first person ("I" or "we") or if it is plural ("you," "they" or any plural noun).

Exercise 4

Change these sentences into "yes/no" questions using "do."

Example: These three organs have a very close relationship.

Do these three organs have a very close relationship?

1. The lungs receive oxygen.

2. These methods keep the patient alive.

3. Symptoms come and go.

4. Chest muscles expand during breathing.

5. Healthy adults breathe about twelve times per minute.

6. Brain cells die quickly after breathing stops.

7. Near-drowning patients have the potential for full recovery.

8. Headaches commonly occur in the presence of stroke.

For verbs in PRESENT, make questions with "does" if the subject is third person singular ("he," "she," "it," or any word which one of those three could be used in the place of).

Exercise 5

Change each of the following sentences into a question with "does."

Example: The brain sends signals to the heart.

Does the brain send signals to the heart?

1. Air passes through the windpipe.

2. Cardiac arrest occurs suddenly.

3. An unconscious person's tongue falls against the back of the throat.

4. The windpipe extends into the chest cavity.

5. Blood releases carbon dioxide.

6. Irreversible brain damage occurs.

7. The patient has a good chance for survival.

8. The patient has a weak pulse.

Exercise 6

This exercise has all the different types of "yes/no" questions together. For each problem, make a "yes/no" question.

Examples: The patient is bleeding.

Is the patient bleeding?

He had a heart attack.

Did he have a heart attack?

The patient could suffer shock.

Could the patient suffer shock?

The heart receives blood from the lungs.

Does the heart receive blood from the lungs?

1. The heart is a muscular organ.

2. The brain is most sensitive to oxygen deprivation.

3. Certain factors increase the risk of heart attack.

4. People can reduce their chance of suffering heart disease.

5. Every person should take precautions.

6. The patient thinks he has indigestion.

7. The first responder must act immediately.

8. The patient ate less than one hour ago.

9. Someone called the EMS.

10. The patient's airway is unobstructed.

11. The patient's eyes respond to light.

12. A spontaneous gasp of breathing will occur.

13. Trained personnel can relieve the rescuer.

14. The patient will move his arms or legs on his own.

15. The patient's pupils react to light.

16. Oxygen enters the body through respiration.

17. Air pressure is equal inside and outside the chest cavity.

18. The amount of air breathed in and frequency of breathing vary.

19. The heart stopped.

20. The airway is partially obstructed.

21. The lips of a patient in respiratory distress appear cyanotic.

22. Toxic gases can cause suffocation.

23. The pulse becomes rapid and weak.

Look at the two sentences in the example below:

k) Use of the techniques will restore breathing.

l) Use of the techniques results in restoration of breathing.

Sentence "k" of the example uses "restore" in the verb form, while sentence "l" uses "restoration," the noun form. Many verbs have an equivalent noun form, and often these forms end in "tion."

Exercise 7

For each verb in the exercise, write its noun form in the first blank, then put the letter of the correct definition in the second blank.

Example: deplete depletion b

1. restore _____ _____

2. protect _____ _____

3. resuscitate _____ _____

4. exhaust _____ _____

5. suffocate _____ _____

6. produce _____ _____

7. deprive _____ _____

8. complicate _____ _____

9. continue _____ _____

10. ventilate _____ _____

a) prevents harm
b) uses something up
c) creates
d) brings something back
e) is completely tired
f) keeps something away
g) prevents breathing
h) gives air
i) revives
j) doesn't stop
k) makes something difficult

Essential Vocabulary and Expressions

alert	choke	elevate
hospitalization	depress	expand
potential	windpipe	cardiac
deprivation	precaution	indigestion

1. If you are careful to prevent something from happening, you take _____ against it.
2. _____ means "awake and thinking sharply."
3. To _____ means to grow larger.
4. If the brain does not receive oxygen, it suffers oxygen _____
5. To _____ means to get something caught in your throat so that you cannot breathe.
6. The structure through which air reaches the lungs is called the _____ .
7. If you lift something up, you _____ it.
8. _____ is putting a patient into the hospital for special care.
9. A patient who complains of pain in the stomach and other food-related symptoms may be suffering from _____ .
10. A "heart attack" is also called a _____ arrest.
11. _____ means to "push down" on something.
12. The "possibility" of something is the _____ for it.

Lesson 8

In lesson 7 we looked at the "yes/no" questions. The other important type of question which a first responder must be able to use is the "open ended" question. Open ended questions use special words to get details about the patient's condition or location, the cause of an accident, or other data which are helpful in making correct decisions. Consider the following:

a) Someone called the EMS.

b) Who called the EMS?

c) Something broke the patient's arm.

d) What broke the patient's arm?

In the examples above, we don't know the name of the person who called the EMS (in example "a"), and we don't know the thing which broke the patient's arm (in example "b"). Since the piece of information that we want to know in each case is the SUBJECT of its sentence, we replace that unknown subject with the open ended question word. Now look:

e) The patient feels something.

f) What does the patient feel?

g) The first responder helps someone.

h) Who does the first responder help?

In examples "e" and "g," the piece of information that we want to know is the OBJECT of its sentence. Making questions then requires two changes: First, the correct "question word" is added to the front of the sentence, and second, either "do" or "does" follows the question word. (The rule about "do" or "does" is the same as for PRESENT tense "yes/no" questions.)

Exercise 1

Change each sentence below into an "open ended" question.

Example: The patient sees something.

What does the patient see?

1. Someone knows about the accident.

2. The patient has something in his eye.

3. Something causes cardiac arrest.

4. Heart attacks most likely happen to someone.

5. The first responder most easily rescues someone.

6. Something helps the patient to recover.

7. The first responder has to know something.

8. Something happens to the patient.

9. The patient feels something.

10. Something causes breathing to stop.

The problems in exercise 1 are in the PRESENT tense. As with "yes/no" questions, when "do" is needed, its PAST tense form is "did."

Exercise 2

Change each sentence into an "open ended" question using "did."

Example: The patient said something.

What did the patient say?

1. The patient ate something.

2. The police spoke to someone.

3. The first responder bandaged someone.

4. We used something for a tourniquet.

5. The bystanders called someone to help.

6. The patient complained about something.

7. The patient fell on something.

In addition to "who" and "what," there are a number of "open ended" question words each used to get particular details. Consider the examples below:

i) The patient's arm is bleeding.

j) Which arm is bleeding?

The patient has two arms -- a right one and a left one. The question word "which" is used to determine the specific item when there are two or more.

Exercise 3

For each statement, make an "open ended" question with "which."

Example: The patient's leg is fractured.

Which leg is fractured?

1. Some joints are freely movable.

2. One pupil is dilated.

3. The patient cut an artery.

4. The patient shows signs of shock.

5. One of the patient's ears is torn.

6. One foot has torn ligaments.

7. One of the bystanders knows the patient.

8. One lung is bruised.

9. The patient cut a lip.

10. One of the patients needs CPR.

11. She injured a foot.

12. One of the arms needs a bandage.

Sometimes the time of an event can be a very important piece of information for a rescuer. The "open ended" question word related to time is, of course, "when."

k) He fell into the water.

l) <u>When</u> did he fall into the water?

Exercise 4

Make a question for each sentence below using "when."

Example: She became sick.

When did she become sick?

1. The patient lost consciousness.

2. The patient went into shock.

3. The heart stopped beating.

4. The child ate toxic chemicals.

5. The patient's arm hurts.

6. The patient took the medication.

7. The wound started to bleed.

8. The patient has chest pains.

9. The patient is unresponsive.

10. The patient gets dizzy.

11. A bystander called the EMS.

12. The pain worsened.

The "open ended" question word that asks about places is, as you know, "where." Look at the example:

m) The patient hurts somewhere.

n) Where does the patient hurt?

The expressions "is located" and "are located" frequently occur in questions with "where." Notice the example:

o) The heart is located somewhere.

p) Where is the heart located?

The item being asked about comes between the two words "is located" in the question form.

Exercise 5

Change each sentence below to a question using "where."

Example: You hurt somewhere.

Where do you hurt?

1. The fractured bone is somewhere.

2. The patient is bleeding somewhere.

3. The injury is located somewhere.

4. The bystanders went somewhere.

5. The kidneys are located somewhere.

6. The ambulance is somewhere.

7. The patient lives somewhere.

8. The correct hand position for CPR is somewhere.

9. Immovable joints are located somewhere.

10. The ambulance is taking the patient somewhere.

For information about the degree, amount, or method of something, use the "open ended" question word "how."

q) I can contact the patient's family in some way.

r) How can I contact the patient's family?

In the example above, "how" is used to find out the "method." A bystander may tell you a telephone number or address, giving you a way to solve the problem.

s) The pains happen often.

t) How often do the pains happen?

In the example above, you want to know degree. Does "often" mean once an hour, once a minute, or once every ten seconds? Notice that the degree word "often" comes to the front of the question with "how."

u) The patient lost a lot of blood.

v) How much blood did the patient lose?

For questions about amount, use "how much" (or "how many" if the item can be counted.)

Exercise 6

Change each statement into an "open ended" question using "how."

Example: Moving the leg is very painful.

How painful is moving the leg?

1. The patient is old.

2. The patient ate long ago.

3. The patient has many injuries.

4. The pulse is strong.

5. The breathing is slow.

6. The pain is very sharp.

7. The patient shows many symptoms of shock.

In lesson 7, you saw that it is possible to use "tion" to change a verb into a noun, as in the following example:

w) The rescuer must <u>protect</u> the patient.

x) The rescuer must assure the patient's <u>protection</u>.

Now consider the following:

y) The patient does not <u>respond</u>.

z) The patient does not give a <u>response.</u>

For many "verb/noun" pairs, such as "respond/response" from the above example, it is easiest to become familiar with the pair rather than trying to remember a rule that relates them.

Exercise 7

For each verb in the exercise, write its noun form in the first blank, then put the letter of the correct definition in the second blank.

Example: know knowledge h

1. interfere _____ ____

2. expand _____ ____

3. resemble _____ ____

4. die _____ ____

5. survive _____ ____

6. impair _____ ____

7. remove _____ ____

8. block _____ ____

a) closes an opening
b) not dying
c) takes something out
d) disturbs or bothers
e) not life
f) looks like
g) breaks or hurts
h) information
i) increase

Essential Vocabulary and Expressions

obstructed	spontaneous	essential
cyanotic	deaf	unresponsive
dizzy	detect	pupil
clammy	steady	temperature

1. "Unmoving" or "continuing smoothly" is _____ .

2. Something that happens suddenly without any clear cause is _____ .

3. If the patient doesn't answer your questions or react to your efforts to help, he is _____ .

4. _____ means having a dark blue or "cyan" color.

5. When you measure the patient's _____ , you find out how hot or cold she is.

6. If the patient's skin is cold and wet, it is _____ .

7. To _____ something is to notice it or recognize it.

8. If something is very necessary it is _____ .

9. The large center opening of the eye is the _____ .

10. A _____ patient may have difficulty standing, may fall, and may be disoriented.

11. If something is "closed off" it is _____ .

12. A _____ ear cannot hear.

Lesson 9

Exercise 1
Review: "Yes/No" Auxiliary and "Be" Questions

Change each sentence below into a "yes/no" question.

Example: The pain is sharp.
Is the pain sharp?

1. The patient is choking.

2. He might have additional injuries.

3. A bystander is calling the EMS.

4. The pulse will be thready.

5. He is conscious.

6. Several bones are fractured.

7. She could go into shock.

8. He has eaten in the last hour.

9. The patient is breathing.

10. The rescuer can detect a pulse.

11. The patient has had a drink recently.

12. The patient should lie down.

13. A bystander is directing traffic.

14. The patient is feeling dizzy.

Exercise 2
Review: "Yes/No" Questions with "Did"

Change each sentence into a "yes/no" question using "did."

Example: The patient started breathing.

Did the patient start breathing?

1. The patient went into shock.

2. The injuries required hospitalization.

3. He took his medicine.

4. The rescuer ventilated the patient.

5. She ate less than an hour ago.

6. The first responder made the primary survey.

7. He suffered a heart attack.

8. A bystander called the EMS.

9. She felt pain in her chest.

10. The patient's heart stopped.

Exercise 3
Review: "Yes/No" Questions with "Do" and "Does."

Change each sentence below into a "yes/no" question using "do" or "does," whichever is needed.

Example: Air passes through the windpipe.

Does air pass through the windpipe?

The lungs receive oxygen.

Do the lungs receive oxygen?

1. Headaches sometimes indicate head injuries.

2. The brain sends signals to the heart.

3. Symptoms of shock come and go.

4. An asthma attack occurs suddenly.

5. The patient has a rapid pulse.

6. She has a good chance for survival.

7. Irreversible damage to the brain occurs in a short time.

8. Near-drowning patients have the potential for full recovery.

9. Brain cells die quickly after breathing stops.

10. A healthy adult breathes about twelve times per minute.

11. Chest muscles expand during breathing.

12. The diaphragm assists in breathing.

13. Blood carries oxygen to the body organs.

14. The windpipe extends into the chest cavity.

15. An unconscious person needs careful attention.

16. Injured arteries bleed in "spurts."

17. Injured veins leak blood in a steady stream.

18. The symptoms of internal bleeding include cold, clammy skin.

Exercise 4
Review: "Open Ended" Questions with "What" and "Who"

Change each of the following into an "open ended" question.

Example: Someone knows about the accident.
Who knows about the accident?

1. Something caused the patient's injuries.

2. The patient sees something.

3. Something caused the patient's breathing to stop.

4. Heart attacks most frequently affect someone.

5. Something caused the patient's allergic reaction.

6. Something helps the patient to recover.

7. The rescuer has to know something.

8. Someone saw the accident.

9. Something causes severe internal bleeding.

10. Someone called the ambulance.

Exercise 5
Review: "Open Ended" Questions with "Which"

For each problem below, ask an open ended question using "which."

Example: One of the arms needs a bandage.
Which arm needs a bandage?

1. The patient's leg is fractured.

2. A foot is injured.

3. Some joints are immovable.

4. One of the bystanders went to call the EMS.

5. One pupil is dilated.

6. A lip is bleeding.

7. The patient cut an artery.

8. One lung is injured.

9. The patient shows signs of cardiac arrest.

10. One of the patient's ears is deaf.

Exercise 6
Review: "Open Ended" Questions with "When"

Make a question for each sentence below using "when."

Example: The pain begins.

When does the pain begin?

1. She became sick.

2. He called an ambulance.

3. She lost consciousness.

4. He feels weak.

5. The heart stopped beating.

6. The patient is unresponsive.

7. The child ate toxic chemicals.

8. The patient has chest pains.

9. Her arm is tender.

10. The wound bleeds.

Exercise 7
Review: "Open Ended" Questions with "Where"

Change each sentence into a question using "where."

Example: The ambulance is taking the patient somewhere.

Where is the ambulance taking the patient?

1. You hurt somewhere.

2. The medicine bottle which the child drank from is somewhere.

3. The pain starts somewhere.

4. The fractured bone is somewhere.

5. The correct hand position for CPR is somewhere.

6. The patient is bleeding somewhere.

7. The patient's family is somewhere.

8. The injury is located somewhere.

9. The ambulance is somewhere.

10. The bandages are somewhere.

11. The stomach is located somewhere.

12. The patient's head injury is somewhere.

Exercise 8
Review: "Open Ended" Questions with "How"

Change each statement into an "open ended" question using "how."

Example: The patient shows many symptoms of shock.

How many symptoms of shock does the patient show?

1. Moving the leg is very painful.

2. The patient's injuries are very serious.

3. The patient has many bleeding wounds.

4. The child drank much toxic chemical.

5. The breathing is very slow.

6. The patient's pulse is very weak.

7. The patient ate very long ago.

8. There are many bones in the body.

9. The patient has lost much blood.

10. You have been performing CPR for very long.

11. The patient's temperature is very high.

12. The patient is very old.

13. There were many bystanders at the accident.

14. The patient lost consciousness very quickly.

15. You can get help very fast.

Lesson 10

You already know that many of the sentences in technical reading, such as medical books and emergency procedures manuals, appear in the passive. Look at the example:

a) Proper emergency care is given.

b) Somebody gives proper emergency care.

Of course, both sentences of the example mean the same thing. Sentence "a," however, doesn't require the word "somebody." If we don't know who is doing an action, or we don't want to give that information, the passive form, as in example "a," is the correct form to use.

Exercise 1

For each PASSIVE sentence below, give the ACTIVE meaning. Sometimes you will need to add a subject like "somebody."

Example: Emergency care is properly administered.

Somebody administers emergency care properly.

1. The first responder is involved in an emergency situation.

2. The patient was observed during treatment.

3. The spine is divided into five sections.

4. The nerves were lacerated.

5. Several conditions are considered life-threatening.

6. The Medic Alert symbol is worn as a necklace.

7. Medical professionals are quickly called.

8. The external bleeding was controlled.

9. Splints are used to immobilize fractures.

10. Splints are made from various materials.

In exercise 1, sentence seven says "Medical professionals are quickly called." This sentence is PASSIVE because either we don't know who calls them, or we don't want to give that information. When we write the "active" version, we add the subject "somebody": "Somebody quickly calls medical professionals." Now look at an example:

c) The head is composed of twenty-two bones.

The active sentence that means the same thing as the example would be something like "Somebody composes the head of twenty-two bones." This active form sentence doesn't make much sense, because nobody actually "composes" the head. Sentences which talk about scientific physical facts use PASSIVE for this reason. There is no "by somebody" at the end of the PASSIVE form.

Exercise 2

Make a PASSIVE sentence for each active one.

Example: (Somebody) classifies bones according to shape.

Bones are classified according to shape.

1. (Somebody) composes the body of solids and fluids.

2. (Somebody) divides the spine into five sections.

3. (Somebody) attaches the ribs to the breastbone.

4. (Somebody) positions the heart slightly to the left side.

5. (Somebody) calls the lower part of the abdomen the "pelvic cavity."

6. (Somebody) locates the liver in the abdomen.

7. (Somebody) composes blood of plasma and cells.

8. (Somebody) contains many important organs in the abdomen.

9. (Somebody) calls the radius and ulna the "forearm."

10. (Somebody) locates a system of nerves in the skin.

11. (Somebody) divides the heart into four "chambers."

Now consider the following example:

d) Somebody may ask you to assist in an emergency.

e) You may be asked to assist in an emergency.

Sentences like "e" of the example are very common. Because we don't know who "may ask," we use the PASSIVE form.

Exercise 3

Change each sentence below into the PASSIVE. Do not copy the subject "somebody."

Example: Somebody may add other skills to your course.

Other skills may be added to your course.

1. Somebody can define the first responder's duty legally.

2. Somebody should perform a patient survey.

3. Somebody must establish an open airway.

4. Somebody must give ventilation immediately.

5. Somebody must make a careful check for severe bleeding.

6. Somebody can feel the pulse over the carotid artery.

7. Somebody may compare the heart to a pump.

8. Somebody can control external bleeding.

9. Somebody should watch severe injuries closely.

10. Somebody should wrap the bandage around the wound.

11. Somebody should understand the pressure points thoroughly.

12. Somebody must assign a priority to the injuries.

Of course, PASSIVE sentences can be negative, just as any other sentence type can. Here is an example:

f) The patient was given a drink.

g) The patient was <u>not</u> given a drink.

Exercise 4

Change each PASSIVE sentence below into the negative.

Example: The patient was moved.

The patient was not moved.

1. The leg was fractured.

2. Symptoms of shock were noticed.

3. Splints are made of weak materials.

4. Sometimes proper emergency care is given.

5. Bystanders are permitted to interfere with medical professionals.

6. The heart is positioned on the right side.

7. The bones of the middle ear are attached to the skeleton.

8. Some injuries are considered life-threatening.

9. Before the patient sees his doctor, his bandages are removed.

10. Sometimes air splints are available.

11. The heart is located in the abdomen.

12. Care of the patient is stopped before the ambulance arrives.

13. In a "sprain" injury, bones are fractured.

Like the sentences in exercise 4, PASSIVE sentences which contain auxiliary verbs also have negative forms. Consider the example:

h) The patient should be moved.

i) The patient should <u>not</u> be moved.

Notice that the negative form places "not" after the auxiliary verb and before the word "be."

Exercise 5

Change each PASSIVE sentence below to the negative.

Example: The patient should be left alone.
The patient should not be left alone.

1. The bandage should be removed.

2. Wire should be used for a tourniquet.

3. The patient should be handled roughly.

4. Shock patients should be given a drink.

5. Injuries should be overlooked.

6. Treatment is started before the initial patient survey.

7. Fractured bones should be pushed back through an open wound.

8. The patient can be transported before dislocations are immobilized.

9. The patient's fractured arm should be bent or twisted.

10. Rescue breathing should be delayed.

11. The patient should be allowed to lose body heat.

12. Removal of foreign objects from wounds should be attempted.

Now let's consider an earlier example and compare it with a form we've already practiced:

j) The patient should not be moved.

k) Do not move the patient.

The PASSIVE form with an auxiliary verb and negative has very much the same meaning as a negative command. The negative command is a little less polite, but the ideas are very similar.

Exercise 6

Change each PASSIVE sentence below to a negative command.

Example: The patient should not be left alone.

Do not leave the patient alone.

1. The bandage should not be removed.

2. Wire should not be used for a tourniquet.

3. The patient should not be handled roughly.

4. Shock patients should not be given a drink.

5. Injuries should not be overlooked.

6. Treatment is not started before the initial patient survey.

7. Fractured bones should not be pushed back through an open wound.

8. The patient can not be transported before dislocations are immobilized.

9. The patient's fractured arm should not be bent or twisted.

10. Rescue breathing should not be delayed.

11. The patient should not be allowed to lose body heat.

12. Removal of foreign objects from wounds should not be attempted.

As with negatives, positive commands can be expressed using PASSIVE. Here is an example:

1) Open an airway.

m) An airway should be opened.

The PASSIVE form is longer, but again it is a little more polite than the command form.

Exercise 7

Change each command to a PASSIVE sentence. Use "should."

Example: Make a primary survey.

A primary survey should be made.

1. Perform ventilation.

2. Feel the carotid pulse.

3. Control any bleeding.

4. Prevent shock.

5. Examine the patient's pupils.

6. Observe the patient's reactions.

7. Perform CPR.

8. Detect poisoning.

9. Follow the instructions of medical professionals.

10. Determine the condition of the patient.

11. Assign a priority for the treatment of the injuries.

12. Prevent additional injuries to the patient.

Essential Vocabulary and Expressions

sprain	strain	dislocation
fracture	rupture	discoloration
recede	deformity	pelvic
splint	digit	swelling

1. Another word for "finger" or "toe" is _____.

2. An overstretching of muscles or tendons is called a _____.

3. If something "moves back" or "becomes less," we see it _____.

4. A _____ is a broken or cracked bone.

5. An area of the body which puffs up or "grows large" shows _____.

6. An injury to ligaments around a joint is called a _____.

7. The lower part of the abdomen is called the _____ cavity.

8. To _____ means to break apart or tear tissue.

9. A body structure that is physically incorrect is a _____.

10. A _____ is a device used to immobilize a fracture.

11. When a body injury shows an unusual color (like a bruise) it shows _____.

12. If a joint bone slips out of normal position, it suffers a _____.

Lesson 11

In lesson 10 we looked at sentences like those in the following example:

a) Somebody should perform a patient survey.

b) A patient survey should be performed.

Example "b" is the PASSIVE form of example "a," and as we noted earlier, the word "somebody" is left out. Passive sentences like the one in example "b" have a "yes/no" question form. They follow the same rules you already know for forming "yes/no" questions with auxiliary verbs:

c) A patient survey should be performed.

d) Should a patient survey be performed?

Exercise 1

Change each active sentence into a PASSIVE sentence, then make a "yes/no" question.

Example: Somebody must give CPR immediately.

CPR must be given immediately.
Must CPR be given immediately?

1. Somebody must take care.

2. Somebody can open the airway.

3. Somebody should understand patient anatomy.

4. Somebody must bandage bleeding wounds.

5. Somebody can feel the patient's pulse.

6. Somebody can control shock symptoms.

7. Somebody must call an ambulance.

8. Somebody must dress an open wound.

There are usually several ways to give the same information. We see that PASSIVE helps in this way:

e) The first responder protected the bystanders.

f) The bystanders were protected by the first responder.

Another way that PASSIVE gives some choices appears in the example below:

g) The patient's humerus suffered a fracture.

h) The patient's humerus was fractured.

The PASSIVE form in sentence "h" of the example comes from the noun form "fracture" which appears in sentence "g." Many scientific and health words can make this change.

Exercise 2

Change each sentence below into a PASSIVE.

Example: His ankle suffered a sprain.

His ankle was sprained.

1. Stretched tendons may suffer a rupture.

2. Joint ligaments which are pulled too far may suffer a sprain.

3. Eyes can undergo irrigation to clean away chemicals.

4. A patient who isn't breathing should receive ventilation.

5. Bleeding wounds should receive a bandage.

6. Fracture wounds must undergo immobilization.

7. Force applied at a joint may cause it to suffer a dislocation.

8. A twisted bone may suffer a fracture.

9. Open wounds need protection.

10. A dislocation can undergo reduction by a doctor.

In lesson 10 we looked at sentences like those in the following example:

i) A patient survey should be made.

It is possible to make PASSIVE sentences not only with "should," but with all the other auxiliary verbs as well.

Exercise 3

Provide the correct form for the expression in parentheses.

Example: The carotid pulse (may feel).

The carotid pulse may be felt.

1. The leg (should bandage).

2. Stretched tendons (may rupture).

3. Joint ligaments which are pulled too far (may sprain).

4. Sprained ankles (can support) with an ankle bandage.

5. Dislocations (may cause) by force applied at or near a joint.

6. Swelling (can minimize) with ice.

7. A patient who isn't breathing (should ventilate).

8. Pinched blood vessels (may cause) by fractures.

9. Plastic inflatable splints (can apply) quickly and easily.

10. Certain protocols (should follow) when using splints.

11. CPR (must continue) until the medical professionals arrive.

12. Fracture wounds near joints (must immobilize).

The examples of PASSIVE that we have looked at have all been positive. Of course, you knew that PASSIVE forms are negative as well. Look at the example:

j) The heart is not located in the abdominal cavity.

k) Patients in shock should not be given drinks or food.

In negatives, the word "not" (or the contracted form "n't") comes after the form of "be," or after any needed auxiliary verb.

Exercise 4

Change each sentence below so that it is BOTH negative and PASSIVE. Note: leave out the words in parentheses.

Example: (Somebody) must move the patient.

The patient must not be moved.

1. (The injury) affects some processes of the body.

2. (Somebody) should attempt pushing bones back through an open wound.

3. (Somebody) should use wire for a tourniquet.

4. (The first responder) should leave the patient alone.

5. (A bystander) should feed a shock patient.

6. (Somebody) must delay ventilation.

7. (The rescuer) must allow loss of the patient's body heat.

8. (You) should take time to move the patient needlessly.

9. (Someone) should attempt removal of foreign objects embedded in wounds.

10. (You) must overestimate your ability to swim.

11. (Someone) will permit bystanders to interfere with rescue operations.

Another important use of PASSIVE is to provide a polite way of expressing orders or commands. Consider the following example:

1) Lift the patient.

m) The patient should be lifted.

Exercise 5

Change each command in the exercise into PASSIVE. Add the word "should" wherever necessary.

Example: Control any bleeding.

Any bleeding should be controlled.

Do not smoke cigarettes.

Cigarettes should not be smoked.

1. Feel the carotid pulse.

2. Stabilize head injuries.

3. Assist medical professionals.

4. Prevent shock.

5. Identify life-threatening problems.

6. Provide psychological intervention.

7. Protect bystanders.

8. Do not delay ventilation.

9. Conduct a patient survey.

10. Bandage open wounds.

11. Do not feed shock patients.

An alternate choice for PASSIVE form that is very common in conversations about injuries is the "get" form. Look at the example:

n) Her shoulder was dislocated.

o) Her shoulder got dislocated.

The "get" PASSIVE form uses the same general rules as the form you already know. Instead of using "am," "is," or "are" for present tense sentences, use "get" or "gets." For past tense sentences, use "got" instead of "was" or "were."

Exercise 6

Change each sentence below into PASSIVE using the "get" form. Leave out the words in parentheses.

Example: (Something) sprained his ankle.

His ankle got sprained.

1. (Something) fractured the patient's humerus.

2. (Someone) transported the patient.

3. (Something) frightened the patient.

4. (Something) twisted the patient's foot.

5. (Something) caught the patient's hand.

6. (Something) injured the patient's eye.

7. (Something) dislocates the patient's jaw.

8. (Something) ruptured a blood vessel.

9. (Something) tore the patient's skin.

10. (Someone) rescued the child.

11. (Someone) treats the patient.

In lessons 7 and 8 we saw that many words used in emergency English have different forms when used as nouns or verbs.

p) The patient might suffocate. (verb form)

q) The patient might suffer suffocation. (noun form)

Although many of the noun forms are made with "tion," there are some that require other endings.

r) The patient has a good chance to survive. (verb form)

s) The patient has a good chance for survival. (noun form)

There are also a few which remain the same, whether they are nouns or verbs.

t) The tendons may rupture. (verb form)

u) The tendons may suffer a rupture. (noun form)

Exercise 7

For each verb, write the noun form in the answer space.

Example: injure injury

care care

1. fracture _____

2. circulate _____

3. strain _____

4. displace _____

5. sprain _____

6. bandage _____

7. recede _____

8. dislocate _____

Essential Vocabulary and Expressions

prolong	bruise	undue
outstretched	disability	wrist
cravat bandage	snug	spasm
immobilize	dress (a wound)	alleviate

1. To _____ pain is to "make it easier" or "remove" it.

2. "Extended forward" means _____.

3. To "increase the time required to do something" is to _____ it.

4. To _____ a fracture is to hold it so that it cannot move.

5. A _____ is made from a large triangular piece of cloth.

6. A patient suffers a _____ when the skin is not broken, but small blood vessels break, causing dark patches of skin.

7. _____ is another word for "tight."

8. Another word for "needless" or "unnecessary" is _____.

9. If you apply a protective cover to a wound to stop any bleeding and keep the wound clean, you _____ it.

10. A person who cannot perform a certain action suffers a _____.

11. A sudden contraction of muscles is called a _____.

12. The _____ is the joint between the hand and the arm.

Lesson 12

Exercise 1
Review: Passive from Active

Change each "active" form into a PASSIVE form. Leave out the words in entheses.

mple: (Somebody) involves the first responder in emergency situations.
The first responder is involved in emergency situations.

(Somebody) makes splints from firm materials.

(Somebody) observes the patient during treatment.

(Somebody) uses splints to immobilize injuries.

(Somebody) controlls the external bleeding.

(Somebody) divides the spine into five sections.

Somebody) wears the Medic Alert symbol as a necklace.

Somebody) cuts the nerves.

Somebody) locates a system of nerves in the skin.

Somebody) composes blood of plasma and cells.

(Somebody) positions the heart slightly to the left side.

(Somebody) attaches the ribs to the breastbone.

(Somebody) carefully protects the internal organs.

Somebody) calls the lower part of the abdomen the "pelvic cavity."

Somebody) composes the body of solids and fluids.

Exercise 3
Review: Negative with PASSIVE

Change each sentence below into the negative.

ple: In a sprain injury, bones are fractured.

In a sprain injury, bones are not fractured. ented.

The patient was moved.

ystanders are allowed to interfere with medical professionals.

he patient is left alone.

he brain is located in the abdomen.

ymptoms of shock were noticed.

ometimes air splints are available.

me injuries are considered life-threatening.

e bones of the middle ear are attached to the skeleton.

ock patients are given drinks and food.

leeding wounds are left open.

efore the patient sees his doctor, his bandages are removed.

he heart is positioned on the right side.

he humerus bone is located in the leg.

justment of fractures involving the spine is attempted.

ractures of the elbow are bent or twisted while bandaging.

Exercise 5
Review: PASSIVE and Negative Commands

Change each PASSIVE sentence into a negative command.

Example: The patient should not be handled roughly.

Do not handle the patient roughly.

1. Removal of foreign objects from wounds should not be attempted.

2. The bandage should not be removed.

3. The patient should not be allowed to lose body heat.

4. Wire should not be used for a tourniquet.

5. Ventilation should not be delayed.

6. Shock patients should not be given a drink.

7. Fractured bones should not be pushed back though an open wound.

8. Injuries should not be overlooked.

9. Treatment should not be started before the primary survey.

10. The patient should not be transported before fractures are immobilized.

11. The patient's fractured arm should not be bent or twisted.

12. Bystanders should not be permitted to interfere with treatment.

13. Activation of the EMS should not be delayed.

14. Fractures to the spine should not be adjusted.

15. The patient should not be needlessly frightened.

Exercise 6
Review: PASSIVE and "Yes/No" Questions

Change each sentence into a "yes/no" question.

Example: Care must be taken.
Must care be taken?

1. An open wound must be covered.

2. CPR must be given immediately.

3. An ambulance should be called.

4. The airway can be opened.

5. Heart diseases can be prevented.

6. The patient should be kept warm.

7. Patient anatomy must be understood.

8. Shock symptoms can be controlled.

9. The patient's pulse can be felt.

10. A patient survey should be performed.

11. Fracture wounds should be immobilized.

12. The patient's clothing should be loosened.

13. Medical professionals must be assisted.

14. Pressure should be applied to bleeding wounds.

15. Internal bleeding can be detected.

Exercise 7
Review: PASSIVE and Noun Forms

Change each sentence below into a PASSIVE.

Example: Stretched tendons may suffer a rupture.

Stretched tendons may be ruptured.

1. His ankle suffered a sprain.

2. A dislocation can undergo reduction by a doctor.

3. Pulled joint ligaments may suffer a sprain.

4. Open wounds need protection.

5. Eyes can undergo irrigation to clean away any chemicals.

6. Force applied at a joint may cause it to suffer dislocation.

7. A patient who isn't breathing should receive ventilation.

8. Bleeding wounds should receive a bandage.

9. A twisted bone may suffer a fracture.

10. Careless bystanders may suffer injury.

11. In CPR, the sternum should undergo compression.

12. A sprain injury should receive elevation.

13. EMS personnel should receive information about the patient's condition.

14. A dislocated joint may show deformity.

15. Fracture wounds must undergo immobilization.

Exercise 8
Review: "Get" PASSIVE

Change each sentence below into the PASSIVE using the "get" form. Leave out the words in parentheses.

Example: (Someone) treats the patient.
The patient gets treated.

1. (Something) sprained his ankle.

2. (Someone) rescued the drowning victim.

3. (Something) fractured the patient's femur.

4. (Something) cut the patient's skin.

5. (Someone) called the ambulance.

6. (Something) ruptured a tendon in the patient's knee.

7. (Something) frightened the patient.

8. (Something) dislocates the patient's shoulder.

9. (Something) twisted the patient's foot.

10. (Something) caught the patient's clothing in some machinery.

11. (Something) bit the patient.

12. (Someone) took the patient to a hospital.

13. (Something) stretched the patient's arm muscles.

14. (Someone) notified the police.

15. (Something) upsets the patient.

Lesson 13

Certain situations or actions are connected to certain results, particularly in talking about patients. Consider the following examples:

a) If the oxygen supply is cut off, death comes in about five minutes.

b) Whenever the oxygen supply is cut off, death comes in about five minutes.

The two sentences of the example say the same idea -- that the cutting off of the oxygen supply results in death.

Exercise 1

Change each sentence below using "whenever" instead of "if."

Example: If the patient suffers life-threatening injuries, emergency care must begin without delay.

Whenever the patient suffers life-threatening injuries, emergency care must begin without delay.

1. If the patient can communicate, you can ask him about his injuries.

2. If air enters through the chest wall, the lungs will not fill.

3. If the respiratory system fails to place oxygen in the blood, the patient dies.

4. If breathing is present, the patient does not require ventilation.

5. If ventilation is started quickly, the patient has a good chance for survival.

6. If the supply of blood is interrupted, the patient's cells do not receive nourishment.

7. If bleeding is not controlled, shock develops.

8. If a joint is twisted suddenly, a sprain may result.

Sentences with "if" have two parts. The "if" part tells the situation condition in which something happens. The other part of the sentence tells the result of the situation, or gives instructions about what you should do. Look at the examples:

c) If ligaments are stretched and torn loose, the patient suffers a dislocation.

d) The patient suffers a dislocation if ligaments are stretched and torn loose.

The two sentences in the example mean the same thing. It doesn't matter whether the "if" part or the "result" part comes first. Notice that in writing, the comma is left out when the "if" part comes last.

Exercise 2

Change each problem below to place the "if" part of the sentence last.

Example: If he has difficulty speaking, the patient might have a dislocated jaw.

The patient might have a dislocated jaw if he has difficulty speaking.

1. If the skin is not broken, the injury is called a "closed wound."

2. If blood vessels are torn beneath a bruise, a hematoma develops.

3. If a flap of skin is torn loose, the wound is an "avulsion."

4. If much blood is lost, the patient develops shock.

5. If the blood supply to the brain is cut off, a stroke can result.

6. If the body temperature drops below 79 degrees Fahrenheit, coma occurs.

7. If water in the body freezes, ice crystals within cells can destroy them.

8. If she is a child, the patient may be unable to talk directly about her injuries.

As we saw in exercise 2, the "if" part of a sentence tells the condition of an event. "If" also can tell the time of an event.

e) If the sternum is properly compressed, a pulse will be perceptible.

f) When the sternum is properly compressed, a pulse will be perceptible.

Exercise 3

Change each sentence below using "when" instead of "if."

Example: If CPR is successful, normal heartbeat returns.

When CPR is successful, normal heartbeat returns.

1. If a patient is poisoned by corrosives, quick action must follow

2. A bone may fracture if it is impacted.

3. If a patient smokes, he increases his risk of heart disease.

4. If a patient is choking, he cannot speak.

5. A muscle may suffer strain if it is overstretched.

6. Strains often occur if patients lift something improperly.

7. The rescuer reduces dislocations only if medical aid is not available.

8. If a heart artery is blocked, the result is a heart attack.

9. If the heart needs more oxygen than it is receiving, angina pectoris occurs.

10. A patient may suffer heat exhaustion if he exercises strenuously in a very hot environment.

11. If a patient is cold and has low blood pressure, he may be suffering from hypothermia.

In lesson 4, we looked at sentences with commands. The example below also involves commands:

g) Perform a patient survey.

h) If the patient stops breathing, provide ventilation.

Sentence "g" of the example contains no "if" part, because it is generally necessary to perform a patient survey, so no specific conditions need to be discussed. In sentence "h," a specific condition is named, because it is not necessary to provide ventilation to a patient unless he is unable to breathe for himself.

Exercise 4

Each problem contains two sentences. Change them into only one new sentence so that the first is an "if" part, and the second is a command.

Example: You are in a vehicle. You park it to protect the accident scene.

If you are in a vehicle, park it to protect the accident scene.

1. A pulse is found. You check the pulse rate and quality.

2. There are no signs of breathing. You give ventilation immediately.

3. You talk to bystanders. You interview them one at a time to avoid confusion.

4. The initial attempt to ventilate the patient is unsuccessful. You reposition the patient's head and repeat.

5. Direct pressure to a wound fails to stop bleeding. You use pressure points.

6. Bleeding continues. You obtain medical assistance.

7. You suspect internal bleeding. You treat the patient for shock.

8. A sprained elbow is bent. You immobilize the injury in the bent position.

9. Swelling increases in a fracture injury. You loosen and reapply bandages to allow for it.

Exercise 5

Change each sentence into a command, and add information using "if" to tell under what condition the command should be followed.

Example: You give ventilation.
Give ventilation if the patient isn't breathing.

1. You perform "abdominal thrusts."

2. You administer chest compressions.

3. You use pressure points to stop bleeding.

4. You immobilize the injury.

5. You place the patient in the "side coma" position.

6. You elevate the patient's extremities.

7. You open the airway.

8. You send a bystander to call the EMS.

9. You dress a wound.

10. You use a tourniquet to control bleeding.

11. You protect bystanders.

12. You cover the patient with a blanket.

13. You use a cravat bandage.

14. You apply external heat to the patient.

15. You check the patient for possible poisoning.

You have already looked at sentences with "should," like the one in the example:

i) The first responder should call the EMS.

Instructions with "should" may contain "conditions," just as any other sentence may:

j) The first responder should use a tourniquet <u>if bleeding cannot be controlled</u>.

The instruction in the "should" part of sentence "b" depends on the condition explained in the "if" part.

Exercise 6

Each problem contains a "condition." Make a sentence telling what the first responder <u>should</u> do.

Example: If there are bystanders ...

If there are bystanders, the first responder should protect them from injury.

1. If there is a foreign object in the patient's mouth ...

2. If the patient has a sprain ...

3. If the patient's heart stops ...

4. If the patient has a dislocated joint ...

5. If the patient has a fractured bone ...

6. If an open wound is bleeding ...

7. If the patient stops breathing ...

8. If the patient suffers a strain ...

9. If the patient has been poisoned ...

10. If the patient suffers a burn injury ...

Essential Vocabulary and Expressions

artery	hematoma	avulsion
impact	corrosive	angina pectoris
hypothermia	ingest	traumatic
anaphylactic	impaled	anatomy

1. The study of the structures of the human body is _____.

2. An _____ carries blood away from the heart.

3. _____ is a Latin expression meaning "pain in the chest."

4. A collection of blood in tissues resulting from an injury or broken blood vessel is called a _____ .

5. An object stuck into a wound is _____ in the wound.

6. Shock related to sensitivity to drugs or other substances is called _____ shock.

7. If you take in substances by mouth, you _____ them.

8. An _____ is an injury that leaves a piece of skin torn away from the body.

9. _____ means "resulting from physical injury or stress."

10. A chemical which can eat away substances, such as a strong acid, is called _____ .

11. _____ is having the body temperature dangerously low.

12. To strike or hit something is to _____ it.

Lesson 14

There are a number of expressions which appear so often in the "if" part of sentences that they have a "short form" used in place of the complete expression. Consider the example:

a) Remove the patient's shirt if it is necessary to do so.

b) Remove the patient's shirt, <u>if necessary</u>.

The portions "it is" and "to do so" are left out of sentence "b," because they appear so often that they do not have to be said.

Exercise 1

Change each sentence in the exercise below so that the underlined portion is a "short form."

Example: Tilt the patient's head downward <u>if it is possible to do so</u>.

Tilt the patient's head downward if possible.

1. Send a bystander <u>if there are any</u> to call the EMS.

2. Open the patient's jaw with the "crossfinger technique" <u>if it is necessary to do so</u>.

3. Avoid blocking traffic at the accident scene <u>if it is possible to do so</u>.

4. Question bystanders about the nature of the accident <u>if it is convenient to do so</u>.

5. Position the patient flat on his back <u>if it is possible to do so</u>.

6. Avoid the use of a tourniquet <u>if it is possible to do so</u>.

7. Stop bleeding <u>if it is present</u>.

8. Use a cravat bandage <u>if it is available</u>.

9. Administer CPR to the patient <u>if it is necessary to do so</u>.

10. Use an inflatable splint <u>if it is convenient to do so</u>.

Questions with "if" parts also have a short form, because they often contain repeated information. Look at the example:

c) What should I do if the patient loses consciousness?

d) What if the patient loses consciousness?

e) What happens if the bleeding doesn't stop?

f) What if the bleeding doesn't stop?

Expressions like "should I do," "happens," and several others are left out of questions that begin with "what" and contain the word "if."

Exercise 2

For each statement below, make two questions with "what" and "if" (one in the long form with all the words, and one in the short form.)

Example: The patient has a fracture.

What should I do if the patient has a fracture?
What if the patient has a fracture?

1. The patient suffers anaphylactic shock.

2. The patient's heart stops.

3. The patient regains consciousness.

4. The patient has swallowed a corrosive agent.

5. The patient's jaw is dislocated.

6. I'm alone at the accident scene.

7. The patient refuses to accept my help.

8. The patient cuts an artery.

9. The patient suffers a spinal injury.

10. An object is impaled in the patient's arm.

The passive voice, which we looked at in lesson 10, can appear in the "if" part of a "condition sentence," the "result" part, or both, as the example demonstrates:

g) If an artery has been cut, bright red blood spurts from the wound.

h) If a patient is in shock, she must not be given food or drink.

i)If the patient's airway has been blocked, it should be reopened.

Exercise 3

Change the underlined portions of each sentence into the passive. Leave out any words in parentheses.

Example: If (something) cuts off the oxygen supply, death quickly occurs.

If the oxygen supply is cut off, death quickly occurs.

1. If (someone) finds a life-threatening condition, begin emergency procedures at once.

2. If (someone) finds a pulse, assess its rate and quality.

3. If there are no signs of breathing, (someone) must give artificial ventilation.

4. If breathing is very shallow, (someone) may not detect it.

5. If (someone) starts artificial ventilation quickly, the patient has a good chance for survival.

6. If (something) cuts off the supply of blood, tissues die for want of nourishment.

7. If (someone) permits bleeding to continue, shock deepens.

8. Treat the patient for shock if (you) suspect internal bleeding.

9. If a fracture of the femur is open, (someone) should dress the wound.

Although the "if" part of a "condition" sentence can use "not" or "don't" just like any other sentence, there is a special form of negative for conditions. This special form uses the word "unless."

j) If you don't know the EMS telephone number, call the telephone operator.

k) Unless you know the EMS telephone number, call the telephone operator.

Exercise 4

Use "unless" in each negative "if" part to replace the forms with "don't" or "not."

Example: If it is not necessary for safety reasons, do not move the patient.

Unless it is necessary for safety reasons, do not move the patient.

1. The patient may die if a life-threatening condition is not corrected.

2. If there are no signs of breathing, artificial ventilation must be given.

3. Ask the patient about her condition if she is not unconscious.

4. In giving ventilation, do not take time to move the patient if the accident site is not hazardous.

5. If attempts to ventilate the patient are not successful, reposition the patient's head and repeat rescue breathing.

6. Use abdominal thrusts to clear the airway if the patient is not an infant.

7. If the patient does not respond to your voice or pain, she is unconscious.

8. CPR will fail if the airway is not adequate.

9. First responders should continue CPR if spontaneous ventilation and circulation have not been restored.

10. If conditions causing shock are not reversed, death may result.

11. If bleeding is not controlled, shock deepens.

12. Do not tie a bandage knot over a wound if such tying is not otherwise indicated.

13. If a dressing or other suitable material is not available, the bare hand can be used to apply pressure to the wound.

14. Elevation of and direct pressure to wounds should be used if they don't cause pain or aggravate the injury.

15. Pressure points should not be used if direct pressure to the wound doesn't fail to stop bleeding.

16. Avoid using a tourniquet if large arteries are not severed or bleeding is not uncontrolable.

17. After a tourniquet is tightened, it should not be loosened if a physician is not present.

18. If a fractured skull is not suspected as the cause of a nosebleed, stop the bleeding with pressure to the nostrils.

19. Whatever the cause of shock, a deteriorating cycle develops if correction is not immediate.

20. If shock is not reversed, the internal organs eventually die.

21. Elevate the lower extremities of shock patients if other wounds and discomfort do not make it impossible.

22. If a commercial splint is not available, use an improvised splint to immobilize a fracture.

23. Do not induce a poisoning victim to vomit if you are not certain that the poison was non corrosive.

Sometimes the "condition" involves two or more possibilities. Look at the example:

1) The patient may be suffering from alcohol poisoning if there is blurring of vision or if there is muscular incoordination.

The example sentence means the either of the two symptoms is an adequate indication of alcohol poisoning. It is not necessary for them both to be present.

Exercise 5

For each situation described below, write a "condition" with two possibilities.

Example: The patient may be in shock.

The patient may be in shock if he is restless or if he is disoriented.

1. The patient may be suffering respiratory distress.

2. A patient may be choking.

3. The patient may have the early signs of a heart attack.

4. An unconscious patient's heart may have stopped.

5. A patient may have internal bleeding.

6. The patient may have strained a muscle.

7. The patient may have dislocated a joint.

8. A bone may be fractured.

9. The patient may have ingested poison.

10. The snake which bit a patient may be poisonous.

11. The patient may be suffering from heat stroke.

Essential Vocabulary and Expressions

capillaries	coordination	blur
disoriented	wheeze	inhale
lethargy	stupor	nausea
hazard	impair	hyperventilate

1. To draw air into the lungs is to _____ .

2. _____ means sickness in the stomach.

3. To _____ something is to make it weaker or worse.

4. If something causes a patient's vision to be cloudy or unclear, it causes the vision to _____ .

5. The smallest blood vessels are the _____.

6. _____ means to breathe abnormally rapidly and deeply.

7. Another word for being abnormally tired and lazy is _____ .

8. If you don't know who you are or where you are, you're _____ .

9. A _____ is something that can cause injury.

10. _____ of muscles is when they "work together."

11. A state of mental confusion and greatly reduced sensibilities is called a _____ .

12. To _____ is to breathe with difficulty while making a whistling sound.

Lesson 15

Exercise 1
Review: If and Always

In each problem below, replace "if" with "when" and add "always" to the second half of the sentence.

Example: If the patient can communicate, you can ask him about his injury.

When the patient can communicate, you can always ask him about his injury.

1. If the patient suffers life-threatening injuries, emergency care must begin without delay.

2. If a joint is twisted suddenly, a sprain may result.

3. If ventilation is started quickly, the patient has a good chance for survival.

4. If bleeding is not controlled, shock develops.

5. If the patient suffers a cut injury, the wound bleeds.

Exercise 2
Review: Order of If/Result

Change each problem below to place the "if" part of the sentence last.

Example: If the skin is not broken, the injury is called a "closed wound."

The injury is called a "closed wound" if the skin is not broken.

1. If he has difficulty speaking, the patient might have a dislocated jaw.

2. If she is a child, the patient may be unable to talk directly about her injuries.

3. If blood vessels are torn beneath a bruise, a hematoma develops.

4. If water in the body freezes, ice crystals in cells can destroy them

Exercise 3
Review: If in Commands

Each problem below contains two sentences. Change them into only one new sentence so that the first is an "if" part and the second is a command.

Example: A pulse is found. You check the pulse for rate and quality.

If a pulse is found, check it for rate and quality.

1. You are in a vehicle. You park it to protect the accident scene.

2. Swelling increases in a fracture injury. You loosen and reapply bandages to allow for it.

3. There are no signs of breathing. You give ventilation immediately.

4. A sprained elbow is bent. You immobilize the injury in the bent position.

5. Direct pressure to a wound fails to stop bleeding. You use pressure points.

Exercise 4
Review: If with Commands

Change each sentence into a command, and add information using "if" to tell under what condition the command should be followed.

Example: You open the airway.

Open the airway if it is blocked.

1. You give ventilation.

2. You check the patient for possible poisoning.

3. You administer chest compressions.

4. You apply external heat to the patient.

5. You elevate the patient's extremities.

6. You use a cravat bandage.

7. You use pressure points to stop bleeding.

8. You cover the patient with a blanket.

9. You immobilize the injury.

10. You protect bystanders.

11. You place the patient in the "side coma" position.

12. You use a tourniquet to control bleeding.

13. You open the airway.

14. You dress a wound.

15. You send a bystander to call the EMS.

Exercise 5
Review: If with "Should"

Each problem contains a "condition." Make a sentence telling what the first responder <u>should</u> do.

Example: If the patient suffers a burn injury ...

If the patient suffers a burn injury, the first responder should immerse the burn in cool water.

1. If there are bystanders ...

2. If the patient has been poisoned ...

3. If the patient's heart stops ...

4. If an open wound is bleeding ...

Exercise 6
Review: If "short forms"

Change each sentence in the exercise so that the underlined portion is a "short form."

Example: Send a bystander <u>if there are any</u> to call the EMS.

Send a bystander, if any, to call the EMS.

1. Tilt the patient's head downward <u>if it is possible to do so</u>.

2. Use an inflatable splint <u>if it is convenient to do so</u>.

3. Open the patient's jaw with the "crossfinger technique" <u>if it is necessary to do so</u>.

4. Use a cravat bandage <u>if it is available</u>.

5. Avoid blocking traffic at the accident scene <u>if it is possible to do so</u>.

6. Stop bleeding <u>if it is present</u>.

7. Question bystanders about the nature of the accident <u>if it is convenient to do so</u>.

8. Administer CPR to the patient <u>if it is necessary to do so</u>.

9. Position the patient flat on her back <u>if it is possible to do so</u>.

10. Avoid the use of a tourniquet <u>if it is possible to do so</u>.

Exercise 7
Review: "What if..." Questions

For each statement below, make a question using the "what if" short form.

Example: An object is impaled in the patient's arm.

What if an object is impaled in the patient's arm?

1. The patient has a fracture.

2. The patient suffers a spinal injury.

3. The patient suffers anaphylactic shock.

4. The patient cuts an artery.

5. The patient's heart stops.

6. The patient refuses to accept my help.

7. The patient regains consciousness.

8. I'm alone at the accident scene.

9. The patient's jaw is dislocated.

10. The patient has swallowed a corrosive agent.

Exercise 8
Review: Unless

Use "unless" in each negative "if" part to replace the forms with "don't" or "not."

Example: CPR will fail <u>if the airway is not adequate</u>.

CPR will fail unless the airway is adequate.

1. <u>If it is not necessary for safety reasons</u>, do not move the patient.

2. Do not induce a poisoning victim to vomit <u>if you are not certain what the poison was</u>.

3. The patient may die <u>if a life-threatening condition is not corrected.</u>

4. <u>If a commercial splint is not available</u>, use an improvised splint to immobilize a fracture.

5. If there are no signs of breathing, artificial ventilation must be given.

6. Elevate the lower extremities of shock patients if other wounds and discomfort do not make it impossible.

7. Ask the patient about her condition if she is not unconscious.

8. If shock is not reversed, the internal organs eventually die.

9. In giving ventilation, do not take time to move the patient if the accident site is not hazardous.

10. Whatever the cause of shock, a deteriorating cycle develops if correction is not immediate.

11. If attempts to ventilate the patient are not successful, reposition the patient's head and repeat rescue breathing.

12. If a fractured skull is not suspected as the cause of a nosebleed, stop the bleeding with pressure to the nostrils.

13. Use abdominal thrusts to clear the airway if the patient is not an infant.

14. After a tourniquet is tightened, it should not be loosened if a physician is not present.

15. If the patient does not respond to your voice or pain, she is unconscious.

16. Avoid using a tourniquet if large arteries are not severed.

17. First responders should continue CPR if spontaneous ventilation and circulation have not been restored.

18. Elevation of and direct pressure to wounds should be used if they don't cause pain or aggravate the injury.

19. If bleeding is not controlled, shock deepens.

Lesson 16

Many scientific and medical words appear both as verbs and nouns. Look at the following example:

a) The patient died because he lacked necessary care.

b) The patient died because of lack of necessary care.

It is possible, of course, to identify groups of "noun/verb" pairs that all fit a pattern. Some verbs, for example, form the noun with "--tion":

relate/relation sedate/sedation create/creation

However, there are many different patterns, and some pairs must simply be memorized. The best approach is to learn the forms of technical words together -- the noun, the verb, and the adjective -- whenever possible.

Exercise 1

Each problem below has two sentences. For sentence "b" in each case, fill in the blank with the correct form of the word that is underlined in sentence "a."

Example: He was saved because we administered proper emergency care.

He was saved because of our administration of proper emergency care.

NOTE: You might need to use a dictionary or your textbook glossary.

1. a) The patient actually consented to receive treatment.

   b) The patient gave his actual _____ to be treated.

2. a) Illness results if something interferes with the normal functioning of the excretory system.

   b) Illness results from any _____ with the normal functioning of the excretory system.

3. a) If you know the respiratory system, it helps you to understand artificial ventilation.

   b) _____ of the respiratory system helps you to understand artificial ventilation.

4. a) Electricity can cause human nerves to paralyze.

   b) Electricity can cause human nerves to suffer _____.

5. a) A sudden electric shock may impair respiration.

   b) A sudden electric shock may cause _____ of respiration.

6. a) Respiratory arrest may occur if a person suffocates.

   b) Respiratory arrest may occur as a result of _____.

7. a) An average male will suffer moderate shock if he loses two pints of blood.

   b) An average male will suffer moderate shock from the _____ of two pints of blood.

8. a) The first responder has a primary obligation to maintain air passages and restore breathing.

   b) The first responder has primary obligation for the _____ of air passages and the _____ of breathing.

9. a) Do not press directly over the site of a fracture.

   b) Avoid applying _____ directly over the site of a fracture.

10. a) The first responder must immediately assess the patient.

    b) The first responder must make an immediate _____ of the patient.

Just as some verbs have a corresponding noun form that ends in "ence," as in "obey/obedience," so some verbs have a corresponding noun form that ends in "ing":

c) The patient's ears may ring.

d) The patient may have a ringing in his ears.

This "ing" form is special because a very large number of verbs can use it, whether they have a separate, different noun form or not. Note for example that the verb "aspirate" has its own noun form -- "aspiration," but there is also an "ing" form -- "aspirating."

Exercise 2

In the chart below, fill in the correct noun forms. In the first blank, use the true noun form (with "tion" or whatever is needed) and in the second blank, fill in the "ing" noun. Follow the example.

Example: sterilize	sterility	sterilizing
1. die		
2. resuscitate		
3. constrict		
4. reduce		
5. contaminate		
6. interfere		
7. assess		
8. paralyze		
9. irrigate		
10. dislocate		
11. digest		
12. infect		
13. deform		
14. secure		
15. injure		

The "ing" noun form that appeared in exercise 2 has a special use, which is why so many verbs have an "ing" noun form in addition to any other noun form they might have. Look at the following:

e) Administering proper care requires knowledge and skills.

The "ing" noun form is used when the action described by its verb is the subject of the sentence. Another way to picture this idea is in the example below.

f) [Someone observes the accident scene] is a vital step.

g) Observing the accident scene is a vital step.

In the example, the action "observe" is the subject of the idea "is a vital step." The "ing" noun form is used to show this.

Exercise 3

For each problem below, change the part in brackets to use an "ing" noun form. Follow the example.

Example: [Someone takes the patient's vital signs] is an important skill.

Taking the patient's vital signs is an important skill.

1. [Someone breathes] is an act that is usually automatic.

2. [Someone bleeds] should be controlled.

3. [Someone bends over at the waist] can cause a back injury.

4. [Someone overstretches muscles] results in a strain.

5. [Someone reduces dislocations] requires special skills.

6. [Someone moves the patient needlessly] isn't a good practice.

7. [Someone covers wounds with a clean dressing] protects them.

8. [Someone immobilizes fractures] prevents additional injuries.

9. [Someone evaluates the patient's condition accurately] is critical.

10. [Someone uses correct medical terminology] is an important ability.

Sometimes, instead of the "ing" noun form, it is possible to use the base form of the verb, marked with "to." Like "ing," this form shows that an idea is being used as a sentence subject. Look at the example.

h) [Someone understands anatomy] is a goal of first responder training.

i) To understand anatomy is a goal of first responder training.

Exercise 4

The exercise below contains a list of "goals" for the first responder in emergency care. Change each part in brackets to the "to" form, then add the words "is an important goal in emergency care." Follow the example.

Example: [Someone properly prepares]

To properly prepare is an important goal in emergency care.

1. [Someone knows what not to do, as well as what to do]

2. [Someone cares for life-threatening conditions]

3. [Someone minimizes further injuries and complications]

4. [Someone makes the patient as comfortable as possible]

5. [Someone conserves the patient's strength]

6. [Someone reduces the possibility of shock]

7. [Someone minimizes infection]

8. [Someone arranges transport of the patient to a medical facility]

9. [Someone makes an accurate patient assessment]

10. [Someone controls bleeding]

11. [Someone provides ventilation when needed]

12. [Someone performs CPR if necessary]

Sometimes the "to" form has a special use. It isn't the subject of a sentence, but it's an explanation of why something is done.

j) To treat shock is a major concern.

k) To treat shock you should control hemorrhage.

Notice that in example "j," the verb "is" immediately follows the expression "to treat shock." In that example, "to treat shock" is the subject, and "is" is the verb. In example "k," however, the expression "to treat shock" is not followed by a verb, but by the pronoun "you." The subject of example "k" is "you." The expression "to treat shock" tells why you should control hemorrhage, and is used as a short form of "In order to treat shock."

Exercise 5

Use the "to" form to make a short form of "in order to" with each set of words in brackets. Follow the example.

Example: [Someone opens the airway] you tilt the patient's head backward.

To open the airway you tilt the patient's head backward.

1. [Someone understands emergency care] you must know anatomy.

2. [Someone obtains useful information] you should ask closed ended questions.

3. [Someone assesses breathing] you must look, listen, and feel for five seconds.

4. [Someone protects the patient from additional injury] you must immobilize fractures.

5. [Someone controls bleeding] you may use direct pressure.

6. [Someone begins CPR] you should position the patient on his back.

7. [Someone identifies the victim of a spinal injury] you should look for deformity, paralysis, and pain.

8. [Someone cares for a sprain injury] you apply ice.

9. [Someone treats a victim of poisoning] you must assess the type of poison ingested.

Although in many cases the noun form and verb form for a word are different, as in "paralyze/paralysis," there are a few technical words which have the same form for both noun and verb. Look at the example:

1) To lose weight, the patient diets.

m) To lose weight, the patient goes on a diet.

Example "1" uses the word "diet" as a verb -- it is an action which the patient performs. Example "m" uses the word diet as a noun -- it is the name of a thing which the patient "goes on." It is helpful to recognize words which have the same form for both noun and verb.

Exercise 6

After each verb in the list below, put a check mark in the answer space if the forms for the noun and verb are the same. If they are different, fill in the correct noun form.

Example: diet ✓

paralyze paralysis

1. sprain _____
2. aspirate _____
3. splint _____
4. faint _____
5. poison _____
6. dislocate _____
7. interfere _____
8. strain _____
9. extend _____
10. rupture _____
11. burn _____
12. inflame _____
13. itch _____
14. bandage _____
15. sterilize _____

Essential Vocabulary and Expressions

paralysis	suffocation	sterilize
contaminate	reduce	convulsion
faint	itch	antiseptic
inflammation	involuntary	irrigation

1. An irritating tickling sensation is called an _____.

2. To restore a dislocated part to its normal position is to _____ the dislocation.

3. _____ is the inability to move all or part of the body.

4. Cleaning a wound by washing it with water is called _____.

5. A sudden, violent contraction of the voluntary muscles is called a "fit," or a _____.

6. To _____ is to lose consciousness and fall to the ground.

7. Lack of oxygen or inability to breathe are both called _____.

8. To infect a wound with bacteria is to _____ it.

9. An _____ is any preparation which prevents the growth of bacteria.

10. _____ is the pain, redness, and swelling of a tissue reaction to injury.

11. If you destroy germs, or make something free of bacteria, you _____ it.

12. Muscles that are not consciously controlled by the brain are referred to as _____.

Lesson 17

Many complex sentences have two parts -- a "main clause" that tells the most important information, and an "adverbial clause" that tells extra information, like those below:

a) When a person is injured, someone must give emergency care.

b) The patient loses so much blood that he dies.

c) The patient's head must be tilted so that the airway is open.

d) The left side of the heart requires more oxygen than the right because it generates higher pressures.

In example "a," the adverbial clause tells "when" something happens. In example "b," the adverbial tells "how much." Example "c" shows an adverbial clause that tells "result." And example "d" contains an adverbial clause that gives a "reason."

Exercise 1

For each problem below, change the sentence in brackets into a clause of time. Use "as soon as," "after," "when," "before," or any other time words that you feel will make sense. Follow the example.

Example: [The ambulance arrives.] You may transfer care to the EMS team.

When the ambulance arrives, you may transfer care to the EMS system.

1. [The airway is blocked.] You must try to open it.

2. [You are performing a patient survey.] Be careful not to move the patient.

3. The secondary survey should begin. [Life-threatening conditions have been controlled.]

4. [Air is taken into the lungs.] It passes through the trachea.

5. [Accepted methods to control bleeding fail.] You try using a tourniquet.

6. [You immobilize a fracture.] You examine the bandages to be certain that they do not cut off circulation.

Exercise 2

In each problem below, write a sentence with an adverbial clause expressing "degree" or "how much." Use the information you are given in the problem. Follow the example.

Example: The patient lost much blood. She went into shock.

The patient lost so much blood that she went into shock.

1. The skeleton contains many bones. I can't remember all their names.

2. The patient was in much pain. She lost consciousness.

3. The first responder has many responsibilities. He requires special training.

4. The patient lost much body heat. He began to show signs of hypothermia.

5. The patient did much vigorous exercise. She suffered heat stroke.

6. The patients suffered many injuries. The first responder needed the help of some bystanders to treat all of them.

7. The patient ingested much alcohol. He went into a coma.

8. There are many important steps in patient treatment. It is vital for them to be carefully practiced.

9. Many people die each year because of inadequate emergency care. The first responder has a great responsibility.

10. The patient suffered many burns. He needed the help of medical professionals.

11. There was much confusion at the accident scene. It was important to remember emergency procedures training.

12. The patient weighed much. The first responder could not lift him alone.

In exercise 2 above, "so" and "that" are used to tell "how much" or "how many." They also show degree when used with an adjective. Look at the example.

e) She was so cyanotic that we suspected respiratory arrest.

In sentences like the one in the example, "so" and "that" are separated by an adjective (which usually describes the condition of a patient or a circumstance.)

Exercise 3

Use "so" and "that" to make sentences telling degree. Follow the example.

Example: The attack was acute. It almost caught us unprepared.

The attack was so acute that it almost caught us unprepared.

1. The cardiac vessels are very constricted. The patient may suffer cardiac arrest.

2. The patient's abdomen was very painful. The doctor suspected appendicitis.

3. The wound was very superficial. It did not require emergency care.

4. The substance was very toxic. It caused the patient to lose consciousness.

5. The patient was very allergic to a substance. She broke out in hives as soon as she ingested it.

6. The patient was very delirious. He couldn't give accurate information about himself to the first responder.

7. The patient became very dizzy. She had to lie down.

8. The hemorrhaging was very severe. A tourniquet was necessary.

9. The patient's breathing was very shallow. Ventilation might have become necessary.

10. Someone performed CPR very successfully. The patient revived.

As you saw in the examples earlier, some sentences use "so" and "that" together, in order to show a result.

f) He immobilized the fracture so that there wouldn't be additional injuries.

In sentences like the example, the part following "so that" tells what happens <u>as a result</u> of the action of the first part of the sentence.

Exercise 4

Combine each pair of sentences in the problems below using "so that" to show result. Follow the example.

Example: He made a patient survey. He could identify injuries.

He made a patient survey so that he could identify injuries.

1. He performed CPR. He could resuscitate the patient.

2. She used splints and bandages. She could immobilize the fracture.

3. He took the patient's pulse. He could determine whether the patient had proper circulation.

4. She performed abdominal thrusts. She could rescue the patient from choking.

5. He tilted the patient's head back. The airway would remain open.

6. We practice rescue techniques. We become proficient.

7. Loss of blood should be minimized. The patient doesn't go into shock.

8. Wounds should be bandaged properly. The patient's injuries do not become worse.

9. A sprain should be wrapped in a compression bandage. Swelling will recede.

10. A shock patient should be positioned. Her head is lower than her feet.

11. You should talk calmly to the patient. He doesn't become frightened.

Exercise 5

For each problem below, finish the sentence with a clause of "reason" using "because." Follow the example.

Example: The patient suffered shock *because she lost a lot of blood.*

1. We began CPR _____

2. He covered the patient with a blanket _____

3. We elevated the forearm _____

4. She performed ventilation _____

5. The patient does not respond to pain _____

6. The patient's pupils are constricted _____

7. The patient's ankle is swelling _____

8. The patient cannot breathe or speak _____

9. The patient is bleeding _____

10. The patient has hives _____

11. The patient suffered heat stroke _____

12. The patient needed to breathe into a paper bag _____

13. It was necessary to immobilize the joint _____

14. The patient should not be moved _____

15. The patient's pulse is thready _____

16. Rescue breathing should never be delayed _____

As you know, it is often possible to say the same idea in two or more ways in English. Look at the examples.

g) To begin rescue breathing at once is imperative.

h) It is imperative to begin rescue breathing at once.

Sentences with "it," like example "h," are easy to form. Everything in front of the verb moves to the end, and the empty space is filled with the word "it."

Exercise 6

Change each problem sentence to one beginning with "it." Follow the example.

Example: To obtain some information from the patient may be necessary.

It may be necessary to obtain some information from the patient.

1. That first responders prepare themselves is essential.

2. That a first responder evaluate injuries correctly is critical.

3. To explain to the patient what you are doing is important.

4. To cause swelling to recede as quickly as possible is necessary.

5. To control the advance of shock may be critical.

6. To elevate the extremities may be necessary.

7. To immobilize fractures is generally correct.

8. To maintain an open airway is vital.

9. To provide necessary ventilation is imperative.

10. That the first responder is properly trained and certified is assumed.

11. To prevent infection of wounds is a primary concern.

12. To reassure the patient is an important function of the rescuer.

Exercise 7

This exercise contains some words used frequently in medical language. Circle the letter of the choice that means most nearly the same as the one given in the problem.

1. suitable

   a) appropriate
   b) possible
   c) necessary

2. impacted

   a) opened up
   b) hidden under
   c) pushed together

3. improvised

   a) bought at a store
   b) made from available materials
   c) shown to be true

4. countermeasure

   a) how much something weighs
   b) something you do to correct a problem
   c) a skill you have practiced many times

5. anxiety

   a) happiness
   b) confusion
   c) fear

6. manifestation

   a) something that shows or displays
   b) something that causes or starts
   c) something that ends or finishes

Essential Vocabulary and Expressions

critical	laceration	narcotic
puncture wound	retina	seizure
sling	symptom	thoracic
delirious	sterile	incision

1. Something related to the chest is _____.

2. Drugs which depress the central nervous system are _____.

3. The _____ is the lining at the back of the eye.

4. An intentional cut, usually made during surgery, is an _____.

5. The result of a sharp object piercing the skin is a _____.

6. A _____ is a triangular bandage placed around the neck and used to immobilize an arm.

7. If something is free of bacteria, it is _____.

8. A wound made by a tearing or cutting action is a _____.

9. A sudden attack of spasms or convulsions is a _____.

10. A serious or life-threatening condition is sometimes called _____.

11. A patient suffering from confusion, disorientation, and hallucinations is said to be _____.

12. An abnormal feeling that shows the presence of a disorder is called a _____.

Lesson 18

Exercise 1
Review: Noun Forms/Verb Forms

For each problem below, write the correct verb form in the blank space of sentence "b." Follow the example.

Example: The patient gave his actual consent to be treated.

The patient actually consented to be treated.

1. a) He was saved because of our administration of proper emergency care.

   b) He was saved because we properly _____ emergency care.

2. a) The first responder must make an immediate assessment of the patient.

   b) The first responder must immediately _____ the patient.

3. a) Illness may result from any interference with the normal functioning of the excretory system.

   b) Illness may result if something _____ with the normal functioning of the excretory system.

4. a) Avoid applying pressure directly over the site of a fracture.

   b) Do not _____ directly over the site of a fracture.

5. a) Knowledge of the respiratory system helps you to understand artificial ventilation.

   b) If you _____ the respiratory system, it helps you to understand artificial ventilation.

6. a) The first responder has the primary obligation for the maintenance of air passages and the restoration of breathing.

   b) The first responder has the primary obligation to _____ air passages and _____ breathing.

Exercise 2
Review: Noun Forms with "ing" and "to"

In each problem below, the part in brackets can be changed into an "ing" form or a "to" form. Make two sentences using each form once. Follow the example.

Example: [Someone bends over at the waist] can cause a back injury.

Bending over at the waist can cause a back injury.
To bend over at the waist can cause a back injury.

1. [Someone overstretches muscles] results in a strain.

2. [Someone uses correct medical terminology] is an important ability.

3. [Someone cares for life-threatening conditions] is a high priority.

4. [Someone provides ventilation when needed] could save a life.

5. [Someone reduces the possibility of shock] improves the patient's chance for recovery.

6. [Someone immobilizes fractures] prevents additional injuries.

7. [Someone evaluates the patient's condition accurately] is critical.

8. [Someone reduces dislocations] requires special skills.

9. [Someone takes the patient's vital signs] is an important care task.

10. [Someone understands anatomy] is a goal of first responder training.

11. [Someone minimizes infection] is a primary goal in the care of wounds.

Exercise 3
Review: In Order To

Some of the following sentences require "in order to," while others are correct with only the "to" noun form. Use whichever is needed to make a sentence. Follow the example.

Example: [Someone understands emergency care] you must know anatomy.

In order to understand emergency care, you must know anatomy.

[Someone properly prepares] is important in emergencies.

To properly prepare is important in emergencies.

1. [Someone cares for life-threatening conditions] is a primary goal of the first responder.

2. [Someone assesses breathing] you must look, listen, and feel for five seconds.

3. [Someone opens the airway] you tilt the patient's head backward.

4. [Someone treats shock] you should control hemorrhage.

5. [Someone treats shock] is a major concern.

6. [Someone controls bleeding] you may have to use direct pressure.

7. [Someone begins CPR] you should position the patient on his back.

8. [Someone controls bleeding] is a vital function of first responders.

9. [Someone makes an accurate patient assessment] is critical.

10. [Someone cares for a sprain injury] you apply ice.

Exercise 4
Review: True Noun Forms

These verbs have a noun form with "ing," but each also has its own special noun form. In the blank, write the correct noun form using "tion," "ence," or whatever ending is needed.

Example: injure injury

1. deform _____
2. die _____
3. infect _____
4. resuscitate _____
5. digest _____
6. constrict _____
7. dislocate _____
8. contaminate _____
9. irrigate _____
10. interfere _____
11. paralyze _____
12. assess _____
13. inflame _____
14. suffocate _____
15. convulse _____

Exercise 5
Review: So...That Clauses of Degree

Use "so" and "that" to make clauses of degree. Follow the example.

Example: The patient's breathing was very shallow. Ventilation might have become necessary.

The patient's breathing was so shallow that ventilation might have become necessary.

1. The wound was very severe. Bleeding was difficult to control.

2. The attack was very acute. It almost caught us unprepared.

3. The patient's abdomen was very tender. The doctor suspected internal injuries.

4. The patient was very delirious. He couldn't answer questions.

5. The bystanders were very noisy. They interfered with the rescue.

6. The burn was very serious. The patient needed to be hospitalized.

7. The situation was very confused. Nobody could explain exactly what had happened.

8. The hemorrhaging was very difficult to control. A tourniquet was required.

9. The patient was very allergic to a substance. It affected her ability to breathe.

10. The wound was very superficial. It did not require emergency care.

11. Some parents are very careless with poisons. Their children ingest them by accident.

12. The first responder performed CPR very successfully. The patient revived.

Exercise 6
Review: Sentences with "It"

Change each problem sentence to one beginning with "it." Follow the example.

Example: To reassure the patient is an important function of the rescuer.

It is an important function of the rescuer to reassure the patient.

1. To obtain some information from the patient may be necessary.

2. To begin rescue breathing at once is imperative.

3. To immobilize the joint was vital.

4. To use correct medical terminology is essential.

5. To prevent infection of wounds is a primary concern.

6. That first responders prepare themselves is fundamental.

7. That the first responder is properly trained and certified is assumed.

8. To explain to the patient what you are doing is important.

9. To control bleeding is imperative.

10. To cause swelling to recede as quickly as possible is necessary.

11. To maintain an open airway is a primary function.

12. To control the advance of shock may be critical.

13. To immobilize fractures is generally correct.

14. To use a tourniquet may be necessary.

Exercise 7
Review: Vocabulary and Expressions

Some of the words in the vocabulary list below are spelled incorrectly. If a word is correct, make a circle around it. If it is not spelled correctly, cross out the error and write the correct form above the word. Follow the example.

Example: unconscious ~~ambulence~~ ambulance bystander

1.	diaphragm	extremities	vertebray
2.	hemorrage	carotid	alergic
3.	superficial	pathogenic	symtom
4.	deprivation	hospitalization	indigestion
5.	cianotic	dizzy	spontaneous
6.	rupture	discoloration	resede
7.	bruse	spasm	immobilize
8.	corosive	anaphylactic	hematoma
9.	blur	nausia	hyperventilate
10.	anticeptic	itch	contaminate
11.	suffocation	faint	sterilyze
12.	laseration	sling	delirious
13.	incision	criticle	thoracic
14.	retina	seisure	narcotic